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Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1379	13972	26499	3.92	4.0E-06	A1334928.1	EST_HUMAN	tt33a09.x1 NCI_CGAP_HSC2 Homo sapiens cDNA clone IMAGE:2056168 3'
1379	13972	26500	3.92	4.0E-06	A1334928.1	EST_HUMAN	tt33a09.x1 NCI_CGAP_HSC2 Homo sapiens cDNA clone IMAGE:2056168 3'
1522	14114	26651	3.17	4.0E-06	BF365612.1	EST_HUMAN	QV2-NT0046-200600-250-h07 NT0046 Homo sapiens cDNA
2305	14878	27454	1.68	4.0E-06	AW015401.1	EST_HUMAN	UI-H-B10-aa1-f-95-0-U1.s1 NCI_CGAP_Sub1 Homo sapiens cDNA clone IMAGE:2710425 3'
3098	15714	28188	1.26	4.0E-06	AF198349.1	NT	Gallus gallus Dcd2 protein (Dcd2) mRNA, complete cds
3963	16561	29030	1.35	4.0E-06	AW848295.1	EST_HUMAN	IL3-CT0214-150200-074-B03 CT0214 Homo sapiens cDNA
4930	17505	29951	1.86	4.0E-06	A1896939.1	EST_HUMAN	w194c10.x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2432562 3' similar to contains element MER22 repetitive element
5053	17626	30070	2.12	4.0E-06	AL163279.2	NT	Homo sapiens chromosome 21 segment HS21C079
8436	20976	33890	0.53	4.0E-06	O15393	SWISSPROT	TRANSMEMBRANE PROTEASE, SERINE 2
8735	21274	34195	2.66	4.0E-06	AF009560.1	NT	Homo sapiens T cell receptor beta locus, TCRBV7S3A2 to TCRBV12S2 region
9624	22124	35088	1.11	4.0E-06	AJ272265.1	NT	Homo sapiens SPP2 gene for secreted phosphoprotein 24 precursor, exons 1-8
11324	23022	36031	3.84	4.0E-06	AB007955.1	NT	Homo sapiens mRNA, chromosome 1 specific transcript KIAA0486
2208	14784	27357	1.31	3.0E-06	AA700562.1	EST_HUMAN	z334b08.s1 Soares_fetal_liver_spleen_inFLS_S1 Homo sapiens cDNA clone IMAGE:432663 3' similar to contains L1.L1 L1 repetitive element
2208	14784	27358	1.31	3.0E-06	AA700562.1	EST_HUMAN	z334b08.s1 Soares_fetal_liver_spleen_inFLS_S1 Homo sapiens cDNA clone IMAGE:432663 3' similar to contains L1.L1 L1 repetitive element
2307	14879		1.54	3.0E-06	AF202635.1	NT	Homo sapiens PP1200 mRNA, complete cds
2948	15594	28038	1.02	3.0E-06	AA668218.1	EST_HUMAN	ak48g11.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1409252 3' similar to contains LTR1.L3 LTR1 repetitive element
3304	15915		2.41	3.0E-06	A1857779.1	EST_HUMAN	w122a05.x1 NCI_CGAP_U11 Homo sapiens cDNA clone IMAGE:2425616 3' similar to TR:O60734 O60734 LINE-1 LIKE PROTEIN; contains L1.L2 L1 repetitive element
3851	16449	28911	1.06	3.0E-06	BE047094.1	EST_HUMAN	hq64d12.x1 NCI_CGAP_HN13 Homo sapiens cDNA clone IMAGE:3124151 3'
3851	16449	28912	1.06	3.0E-06	BE047094.1	EST_HUMAN	hq64d12.x1 NCI_CGAP_HN13 Homo sapiens cDNA clone IMAGE:3124151 3'
4573	17156	28600	0.68	3.0E-06	T50266.1	EST_HUMAN	y078b10.r1 Stratagene ovary (H937217) Homo sapiens cDNA clone IMAGE:77275 5' similar to contains L1 repetitive element
4681	17243	29697	4.82	3.0E-06	X54816.1	NT	Homo sapiens gene for alpha-1-microglobulin-bikunin, exons 1-5 (encoding alpha-1-microglobulin, N-terminus)
5045	17618	30063	0.94	3.0E-06	J04038.1	NT	Human glyceraldehyde-3-phosphate dehydrogenase (GAPDH) gene, complete cds
5045	17618	30064	0.94	3.0E-06	J04038.1	NT	Human glyceraldehyde-3-phosphate dehydrogenase (GAPDH) gene, complete cds
6308	18915	31688	0.78	3.0E-06	AU159412.1	EST_HUMAN	AU159412 THYRO1 Homo sapiens cDNA clone THYRO1001602 3'
7280	19808		2.79	3.0E-06	P08548	SWISSPROT	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
8027	20568	33473	0.72	3.0E-06	BE662984.1	EST_HUMAN	601336213F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3660314 5'
8618	21157	34070	0.69	3.0E-06	P07743	SWISSPROT	PAROTID SECRETORY PROTEIN PRECURSOR (PSP)

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12152	24394		13.37	3.0E-08	AV385262.1	EST_HUMAN	RC0-LT0001-261199-011-A03 LT0001 Homo sapiens cDNA
216	12877		2.91	2.0E-06	P54366	SWISSPROT	HOMEBOX PROTEIN GOOSECOID
1614	14207		4.46	2.0E-06	P21414	SWISSPROT	POL POLYPROTEIN[CONTAINS: PROTEASE: REVERSE TRANSCRIPTASE: ENDONUCLEASE]
2418	14986	27560	2.2	2.0E-06	AI672138.1	EST_HUMAN	w604603.x1 NCI_CGAP_Kid11 Homo sapiens cDNA IMAGE:2297088 3' similar to contains MER30 b1
2508	15070	27643	1.79	2.0E-06	P04929	SWISSPROT	MER30 repetitive element
2601	15163	27731	1.34	2.0E-06	P06719	SWISSPROT	HISTIDINE-RICH GLYCOPROTEIN PRECURSOR
3570	16174	28656	1.04	2.0E-06	AV657555.1	EST_HUMAN	KNOB-ASSOCIATED HISTIDINE-RICH PROTEIN PRECURSOR (KAHRP)
3825	16425	28887	1.85	2.0E-06	AA173518.1	EST_HUMAN	AV657555 GLC Homo sapiens cDNA clone GLCFDB05 3'
3836	16435	28897	0.63	2.0E-06	AW450215.1	EST_HUMAN	zpo2605.r1 Stratiogene ovarian cancer (#937219) Homo sapiens cDNA clone IMAGE:595232 5'
3844	16443	28904	1.74	2.0E-06	AB030896.1	NT	U1H-B13-eky-g-05-0-U1 s1 NCI_CGAP_Sub5 Homo sapiens cDNA clone IMAGE:2736176 3'
6238	18948		0.79	2.0E-06	AA974932.1	EST_HUMAN	Mus musculus gene for odorant receptor A16, complete cds
6267	18975	31643	0.87	2.0E-06	AI539448.1	EST_HUMAN	on34401.s1 NCI_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1558609 3' similar to contains Alu repetitive element
6570	19168	31665	4.94	2.0E-06	AI819424.1	EST_HUMAN	te51f05.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2090241 3' similar to TR:Q13537
7858	20400		0.89	2.0E-06	AW969223.1	EST_HUMAN	Q13537 MER37 TRANSPOSABLE ELEMENT, COMPLETE CONSENSUS SEQUENCE. ;
8033	20575	33480	0.75	2.0E-06	T12238.1	EST_HUMAN	w90b04.x1 NCI_CGAP_Lym12 Homo sapiens cDNA clone IMAGE:2410083 3'
8770	21309		0.59	2.0E-06	AA772497.1	EST_HUMAN	MR3-SN0087-120400-002-f02 SN0087 Homo sapiens cDNA
8782	21321	34245	1.54	2.0E-06	H62051.1	EST_HUMAN	A447R Heart Homo sapiens cDNA clone A447
9143	21678	34821	0.91	2.0E-06	AF003528.1	NT	zh27c11.s1 Soares_pineal_gland_N3HPG Homo sapiens cDNA clone IMAGE:413300 3' similar to
9143	21678	34822	0.91	2.0E-06	AF003529.1	NT	TR:P70487 P70487 REVERSE TRANSCRIPTASE ;
9617	22117	35080	0.72	2.0E-06	N30576.1	EST_HUMAN	W37c04.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone IMAGE:235974 5' similar to gb:X74929
9833	22331		0.63	2.0E-06	AV748969.1	EST_HUMAN	KERATIN, TYPE II CYTOSKELETAL 8 (HUMAN);
12032	25046	30508	1.81	2.0E-06	P23249	SWISSPROT	Homo sapiens glypican 3 (GPC3) gene, partial cds and flanking repeat regions
12210	24434		6.63	2.0E-06	BE328232.1	EST_HUMAN	Homo sapiens glypican 3 (GPC3) gene, partial cds and flanking repeat regions
36	12715	25174	1.77	1.0E-06	O76082	SWISSPROT	yw66603.s1 Soares_placenta_8to6weeks_2NbHP8to9W Homo sapiens cDNA clone IMAGE:257212 3'
685	13309	25794	1.45	1.0E-06	AF084364.1	NT	AV748969 NPC Homo sapiens cDNA clone NPCAXD05 5'
1500	14092	26631	2.08	1.0E-06	P06125	SWISSPROT	PROTEIN MOV-10
							hs92f02.x1 NCI_CGAP_Kid13 Homo sapiens cDNA clone IMAGE:3144699 3' similar to contains L1 L2 L1
							repetitive element ;
							ORGANIC CATION/CARNITINE TRANSPORTER 2 (SOLUTE CARRIER FAMILY 22, MEMBER 5) (HIGH-AFFINITY SODIUM-DEPENDENT CARNITINE COTRANSPORTER)
							Mus musculus D6M5E protein (D6M5e) mRNA, complete cds
							MEROZOITE SURFACE PROTEIN CMZ-8

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1671	14164	26695	1.12	1.0E-06	AL163278.2	NT	Homo sapiens chromosome 21 segment HS21C078
1627	14220		1.54	1.0E-06	P27625	SWISSPROT	DNA-DIRECTED RNA POLYMERASE III LARGEST SUBUNIT
2037	14619	27186	8.38	1.0E-06	AF184614.1	NT	Homo sapiens p47-phox (NCF1) gene, complete cds
2037	14619	27187	8.38	1.0E-06	AF184614.1	NT	Homo sapiens p47-phox (NCF1) gene, complete cds
4459	17045	29488	14.7	1.0E-06	U07561.1	NT	Human ABL gene, exon 1b and intron 1b, and putative M8604 Met protein (M8604 Met) gene, complete cds
5269	17831	30256	0.99	1.0E-06	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
5269	17831	30257	0.99	1.0E-06	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
5494	18128	30536	4.64	1.0E-06	BF333015.1	EST_HUMAN	MR1-BT0800-030700-002-c06 BT0800 Homo sapiens cDNA
5518	18150	30563	1.08	1.0E-06	BE834518.1	EST_HUMAN	MR3-FN0004-090600-001-e04 FN0004 Homo sapiens cDNA
5518	18150	30564	1.08	1.0E-06	BE834518.1	EST_HUMAN	MR3-FN0004-090600-001-e04 FN0004 Homo sapiens cDNA
5687	18294	30774	1.13	1.0E-06	O60613	SWISSPROT	15 KDA SELENOPROTEIN PRECURSOR
6954	19531	32356	5.96	1.0E-06	P02671	SWISSPROT	FIBRINOGEN ALPHA1(A) CHAIN PRECURSOR
7943	20485		0.66	1.0E-06	AA912623.1	EST_HUMAN	q28-c08 s1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1928842 3'
8216	20757	33671	1.21	1.0E-06	A1347010.1	EST_HUMAN	q254-c02.x1 NCL_CGAP_C08 Homo sapiens cDNA clone IMAGE:1882435 3' similar to contains element
8425	20865	33879	1.23	1.0E-06	A1287878.1	EST_HUMAN	q231-c06.x1 NCL_CGAP_Lym8 Homo sapiens cDNA clone IMAGE:296472 3'
9228	21950	34899	0.98	1.0E-06	N74635.1	EST_HUMAN	zsa55e01.s1 Soares fetal liver spleen 1NFS Homo sapiens cDNA clone IMAGE:296472 3'
9301	21901	34850	0.5	1.0E-06	Q39575	SWISSPROT	DYNEIN GAMMA CHAIN, FLAGELLAR OUTER ARM
9600	22100	35062	3.34	1.0E-06	U82668.1	NT	Homo sapiens shox gene, alternatively spliced products, complete cds
9600	22100	35063	3.34	1.0E-06	U82668.1	NT	Homo sapiens shox gene, alternatively spliced products, complete cds
9643	22143	35111	4.36	1.0E-06	AA132611.1	EST_HUMAN	z317-c08.r1 Stratagene colon (#937204) Homo sapiens cDNA clone IMAGE:587174 5'
9703	22202		3.84	1.0E-06	AA449257.1	EST_HUMAN	z304-c11.s1 Soares_total_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:785493 3' similar to
10382	22876		1.61	1.0E-06	AL163203.2	NT	glb:D26129 RIBONUCLEASE PANCREATIC PRECURSOR (HUMAN);
11502	23951		6.24	1.0E-06	AW890641.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C003
12087	24356	30866	7.83	1.0E-06	L78910.1	NT	RC4-NT0054-120500-012-b03 NT0054 Homo sapiens cDNA
12195	14619	27186	1.67	1.0E-06	AF184614.1	NT	Homo sapiens ADP/ATP carrier protein (ANT-2) gene, complete cds
12195	14619	27187	1.67	1.0E-06	AF184614.1	NT	Homo sapiens p47-phox (NCF1) gene, complete cds
12603	14220		1.38	1.0E-06	P27825	SWISSPROT	Homo sapiens p47-phox (NCF1) gene, complete cds
383	13030	25518	2.01	9.0E-07	AF003529.1	NT	DNA-DIRECTED RNA POLYMERASE III LARGEST SUBUNIT
383	13030	25519	2.01	9.0E-07	AF003529.1	NT	Homo sapiens glycican 3 (GPC3) gene, partial cds and flanking repeat regions
8346	20887		0.57	9.0E-07	AL163280.2	NT	Homo sapiens glycican 3 (GPC3) gene, partial cds and flanking repeat regions
11126	23634	36875	2.95	9.0E-07	AL163281.2	NT	Homo sapiens chromosome 21 segment HS21C080
							Homo sapiens chromosome 21 segment HS21C081

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4885	17460	28912	5.02	8.0E-07	AI288598.1	EST_HUMAN	q182g07.x1 Soares_NhHMPu_S1 Homo sapiens cDNA clone IMAGE:1878876 3'
4885	17460	28913	5.02	8.0E-07	AI288598.1	EST_HUMAN	q182g07.x1 Soares_NhHMPu_S1 Homo sapiens cDNA clone IMAGE:1878876 3'
6047	18666		7.49	8.0E-07	P21414	SWISSPROT	POL POLYPROTEIN [CONTAINS: PROTEASE; REVERSE TRANSCRIPTASE; ENDONUCLEASE]
7944	20489		9.51	8.0E-07	AF135416.1	NT	Homo sapiens UDP-glucuronosyltransferase gene, complete cds
11488	23935		8.73	8.0E-07	T07770.1	EST_HUMAN	EST05660 Fetal brain, Striatum (cat6936206) Homo sapiens cDNA clone HFBEN89
11690	24106		7.89	8.0E-07	AL163280.2	NT	Homo sapiens chromosome 21 segment HS21C080
1908	14491	27052	1.14	7.0E-07	AF167341.1	NT	Homo sapiens membrane interleukin 1 receptor accessory protein (IL1RAP) gene, exons 10 and 11
5710	18336	30841	0.69	7.0E-07	6005700	NT	Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 8 (ABCA8), mRNA
5710	18336	30842	0.69	7.0E-07	6005700	NT	Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 8 (ABCA8), mRNA
10842	23174	36186	1.59	7.0E-07	BE676648.1	EST_HUMAN	7933g01.x1 NCI_CGAP CLL1 Homo sapiens cDNA clone IMAGE:3298496 3' similar to TR:Q96897 Q96897
1958	14540	27096	2.56	6.0E-07	AW855558.1	EST_HUMAN	ENDOGENOUS RETROVIRUS-K, LTR US AND GAG GENE. ; QW3-CT0277-221099-024-611 CT0277 Homo sapiens cDNA
2534	15098	27671	2.3	6.0E-07	AF019413.1	NT	Homo sapiens HLA class III region containing tenascin X (tenascin-X) gene, partial cds; cytochrome P450 21-hydroxylase (CYP21B), complement component C4 (C4B) G11, helicase (SK12W), RD, complement factor B (B1), and complement component C2 (C2) genes. >
4044	18642		1.76	6.0E-07	P41479	SWISSPROT	HYPOTHETICAL 24.1 KD PROTEIN IN LEF4-P33 INTERGENIC REGION
9068	21605	34536	1.94	6.0E-07	BF001867.1	EST_HUMAN	7994f07.x1 NCI_CGAP_Co16 Homo sapiens cDNA clone IMAGE:3314149 3' similar to TR:O75920 O75920
11825	24067	37131	1.83	6.0E-07	AI792950.1	EST_HUMAN	om8705.y6 NCI_CGAP_Kd3 Homo sapiens cDNA clone IMAGE:1554177 5'
11949	24889		2.85	6.0E-07	AW903222.1	EST_HUMAN	QW4-NN1028-250300-121-112 NN1028 Homo sapiens cDNA
348	12998		1.19	5.0E-07	AI831893.1	EST_HUMAN	wh64f10.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2385547 3'
1095	13700		2.21	5.0E-07	AA380830.1	EST_HUMAN	EST193615 Supt cells Homo sapiens cDNA 5' end
3068	15681		0.64	5.0E-07	AI831893.1	EST_HUMAN	wh64f10.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2385547 3'
4751	17332	29775	1.32	5.0E-07	AF149774.1	NT	Homo sapiens NOD1 protein (NOD1) gene, exons 4 through 14 and complete cds
6288	18876	31644	1.13	5.0E-07	U65087.1	NT	Mus musculus OG-2 homeodomain protein (OG-2) gene, partial cds
7124	18464	32281	1.56	5.0E-07	AI393981.1	EST_HUMAN	ig06b05.x1 NCI_CGAP CLL1 Homo sapiens cDNA clone IMAGE:2107853 3' similar to contains Alu
7124	18464	32282	1.56	5.0E-07	AI393981.1	EST_HUMAN	ig06b05.x1 NCI_CGAP CLL1 Homo sapiens cDNA clone IMAGE:2107853 3' similar to contains Alu
7386	18912	32776	18.07	5.0E-07	AW070885.1	EST_HUMAN	ya31a02.x1 NCI_CGAP_Br18 Homo sapiens cDNA clone IMAGE:2568362 3' similar to gb:X15341
8217	20758	33672	0.82	5.0E-07	Q9WUQ1	SWISSPROT	CYTCHROME C OXIDASE POLYPEPTIDE VIA-LIVER (HUMAN); ADAM-TS 1 PRECURSOR (A DISINTEGRIN AND METALLOPROTEINASE WITH THROMBOSPONDIN MOTIFS 1) (ADAMTS-1) (ADAM-TS1)

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8427	20967		1.06	5.0E-07	P09593	SWISSPROT	S-ANTIGEN PROTEIN PRECURSOR
10270	22765	35752	4.46	5.0E-07	A190587.1	EST_HUMAN	CM-BT178-220489-014 BT178 Homo sapiens cDNA
10542	23079	36093	1.56	5.0E-07	P08547	SWISSPROT	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
11391	23843	36607	4.94	5.0E-07	P11087	SWISSPROT	COLLAGEN ALPHA 1(I) CHAIN PRECURSOR
11452	23802		2.43	5.0E-07	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
12391	24889		2.85	5.0E-07	AW862537.1	EST_HUMAN	QV0-CT0383-210400-204-b12 CT0383 Homo sapiens cDNA
4071	16687	29129	1.94	4.0E-07	AW009802.1	EST_HUMAN	wa84h05.x1 NCI_CGAP_Cc3 Homo sapiens cDNA clone IMAGE:2504697 3'
7230	19761		0.98	4.0E-07	AJ272265.1	NT	Homo sapiens SPP2 gene for secreted phosphoprotein 24 precursor, exons 1-8
7311	19839	32697	1.35	4.0E-07	Q9Z2V6	SWISSPROT	HISTONE DEACETYLASE 5 (HD5) (HISTONE DEACETYLASE MHD41)
7311	19839	32698	1.35	4.0E-07	Q9Z2V6	SWISSPROT	HISTONE DEACETYLASE 5 (HD5) (HISTONE DEACETYLASE MHD41)
7663	20405	33312	0.85	4.0E-07	AL163207.2	NT	Homo sapiens chromosome 21 segment HS21C007
8981	21519	34445	5.37	4.0E-07	AW419134.1	EST_HUMAN	xy49g11.x1 NCI_CGAP_Lu34.1 Homo sapiens cDNA clone IMAGE:2856548 3'
10228	22723	35715	0.5	4.0E-07	AL163218.2	NT	Homo sapiens chromosome 21 segment HS21C018
10817	23338	36351	4.05	4.0E-07	A1765528.1	EST_HUMAN	w81b08.x1 NCI_CGAP_Kd12 Homo sapiens cDNA clone IMAGE:2399703 3'
10817	23338	36352	4.05	4.0E-07	A1765528.1	EST_HUMAN	w81b08.x1 NCI_CGAP_Kd12 Homo sapiens cDNA clone IMAGE:2399703 3'
11100	23610		2.06	4.0E-07	BE001828.1	EST_HUMAN	PM1-BN0083-030300-003-e12 BN0083 Homo sapiens cDNA
466	13100	25591	4.51	3.0E-07	U10719.1	NT	Human microfilament-associated glycoprotein (MFAP2) gene, putative promoter region and alternatively spliced untranslated exons
609	13237	25711	2.84	3.0E-07	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
1417	14010	26539	1.65	3.0E-07	M99149.1	NT	Human polymorphic microsatellite DNA
1667	14260		1.95	3.0E-07	M64857.1	NT	Human IgK subgroup 1 germline gene, exons 1 and 2, V-region 018 allele
2090	14670		3.87	3.0E-07	AA526763.1	EST_HUMAN	ri56b09.s1 NCI_CGAP_Ov2 Homo sapiens cDNA clone IMAGE:980825 similar to contains Alu repetitive element; contains L1.13 L1 repetitive element
2327	14898	27471	1.72	3.0E-07	M99149.1	NT	Human polymorphic microsatellite DNA
2508	15072	27845	6.56	3.0E-07	BE005077.1	EST_HUMAN	MRO-BN0115-020300-001-f11 BN0115 Homo sapiens cDNA
2508	15072	27846	6.56	3.0E-07	BE005077.1	EST_HUMAN	MRO-BN0115-020300-001-f11 BN0115 Homo sapiens cDNA
3069	15684	28156	0.79	3.0E-07	T84704.1	EST_HUMAN	xy50f12.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:111895 5'
3195	15807	28280	2.03	3.0E-07	P38739	SWISSPROT	HYPOPHYSAL 63.8 KD PROTEIN IN GUT1-RIM1 INTERGENIC REGION PRECURSOR
4788	17368		0.58	3.0E-07	P20740	SWISSPROT	OVOSTATIN PRECURSOR (OVOMACROGLOBULIN)
4834	17412	29865	7.74	3.0E-07	AV650201.1	EST_HUMAN	AV650201 GLC Homo sapiens cDNA clone GLCCOD01 3'
4878	17453	29905	0.71	3.0E-07	A1797236.1	EST_HUMAN	wa86b12.x1 Soares_NFL_T_GBC.S1 Homo sapiens cDNA clone IMAGE:2347967 3'
5222	17787	30205	1.81	3.0E-07	T57850.1	EST_HUMAN	yc14h08.s1 Stragene lung (#837210) Homo sapiens cDNA clone IMAGE:80705 3' similar to similar to gb:M62982 ARACHIDONATE 12-LIPOXYGENASE (HUMAN)

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5222	17787	30206	1.81	3.0E-07	T57850.1	EST_HUMAN	yc14h09.s1 Stratagene lung (#937210) Homo sapiens cDNA clone IMAGE:80705 3' similar to similar to gb:M62982 ARACHIDONATE 12-LIPOXYGENASE (HUMAN)
5847	18471	31197	12.79	3.0E-07	O68807	SWISSPROT	PROTEIN-ARGININE DEIMINASE TYPE IV (PEPTIDYLARGININE DEIMINASE IV) (PAD-R4)
6128	18743	31496	0.71	3.0E-07	O42280	SWISSPROT	(PEPTIDYLARGININE DEIMINASE TYPE ALPHA)
6804	19395		5.41	3.0E-07	AA815175.1	EST_HUMAN	cc04c10.s1 NCL_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1339890 3'
7519	20039	32908	3.22	3.0E-07	AW797168.1	EST_HUMAN	QV7-UM0036-200300-115-g02 UM0036 Homo sapiens cDNA
7659	20171		1.6	3.0E-07	AI591065.1	EST_HUMAN	w28f1.x1 NCL_CGAP_Ov3 Homo sapiens cDNA clone IMAGE:2261037 3' similar to contains Alu repetitive element; contains element MSR1 MSR1 repetitive element ;
11373	23825		1.68	3.0E-07	BE439409.1	EST_HUMAN	HTM1-025F1 HTM1 Homo sapiens cDNA
12641	24716		6.74	3.0E-07	AJ132352.1	NT	Rattus norvegicus mRNA for 45 kDa secretory protein, partial
31	12710	25168	3.36	2.0E-07	AF262988.1	NT	Homo sapiens TRP2-interacting telomeric RAP1 protein (RAP1) mRNA, complete cds
165	12828	25314	7.91	2.0E-07	L77569.1	NT	Homo sapiens DiGeorge syndrome critical region, telomeric end
185	12828	25315	7.91	2.0E-07	U38849.1	NT	Homo sapiens DiGeorge syndrome critical region, telomeric end
194	12854	25338	45.53	2.0E-07	U38849.1	NT	Fugu rubripes beta-cytoplasmic (vesicular) actin gene, complete cds
778	13397	25898	2.58	2.0E-07	AF003530.1	NT	Homo sapiens homeobox protein CDX4 (CDX4) gene, complete cds and flanking repeat regions
778	13397	25899	2.58	2.0E-07	AF003530.1	NT	Homo sapiens homeobox protein CDX4 (CDX4) gene, complete cds and flanking repeat regions
791	13409		0.81	2.0E-07	P11369	SWISSPROT	RETROVIRUS-RELATED POL POLYPROTEIN [CONTAINS: REVERSE TRANSCRIPTASE ; ENDONUCLEASE]
979	13591	26108	2.56	2.0E-07	AA223260.1	EST_HUMAN	zr08b07.s1 Stratagene NT2 neuronal precursor 937230 Homo sapiens cDNA clone IMAGE:650869 3' similar to gb:L31860 GLYCOPHORIN A PRECURSOR (HUMAN); contains Alu repetitive element;
980	13592	26107	6.66	2.0E-07	T63042.1	EST_HUMAN	yc15g04.s1 Stratagene lung (#837210) Homo sapiens cDNA clone IMAGE:80790 3' similar to contains L1 repetitive element ;
1205	13805	26318	0.76	2.0E-07	Q26768	SWISSPROT	I/6 AUTOANTIGEN
1644	14236	26771	1.88	2.0E-07	Q09701	SWISSPROT	HYPOTHETICAL 72.5 KD PROTEIN C2F7.10 IN CHROMOSOME 1
3679	16280	28820	0.65	2.0E-07	BF131397.1	EST_HUMAN	601818016F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:4044891 5'
3751	16352	28820	22.38	2.0E-07	AF125348.1	NT	Homo sapiens cavedin 1 (CAV1) gene, exon 3 and partial cds
5547	18179	30593	1.81	2.0E-07	AW589066.1	EST_HUMAN	RC3-NN0066-260400-021-g11 NN0066 Homo sapiens cDNA
6789	19362	32171	1.59	2.0E-07	AI208715.1	EST_HUMAN	q956405.x1 Soares Testis NHT Homo sapiens cDNA clone IMAGE:1839177 3'
8405	20945		3.57	2.0E-07	AV728360.1	EST_HUMAN	AV728360 HTC Homo sapiens cDNA clone HTCAEG02 5'
8628	21167	34082	1.1	2.0E-07	AA035198.1	EST_HUMAN	zk27609.s1 Soares pregnant uterus NibHPU Homo sapiens cDNA clone IMAGE:471808 3'
9678	22175		2.27	2.0E-07	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
10168	22683	35658	5.85	2.0E-07	AW892507.1	EST_HUMAN	CM4-NN0003-280300-124-e08 NN0003 Homo sapiens cDNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10383	22877	35868	0.75	2.0E-07	P00751	SWISSPROT	COMPLEMENT FACTOR B PRECURSOR (C3/C5 CONVERTASE) (PROPERDIN FACTOR B) (GLYCINE-RICH BETA GLYCOPROTEIN) (GBG) (PBF2)
10383	22877	35869	0.75	2.0E-07	P00751	SWISSPROT	COMPLEMENT FACTOR B PRECURSOR (C3/C5 CONVERTASE) (PROPERDIN FACTOR B) (GLYCINE-RICH BETA GLYCOPROTEIN) (GBG) (PBF2)
11642	24603		2.57	2.0E-07	BE153717.1	EST_HUMAN	PMO-HT0339-260 100-006-H07 HT0339 Homo sapiens cDNA
11734	24890		3.56	2.0E-07	AI732492.1	EST_HUMAN	zn85h11.x5 Stralagene lung carcinoma 937218 Homo sapiens cDNA clone IMAGE:565029 3' similar to contains THR.52 THR repetitive element ;
1141	13744		1.17	1.0E-07	AL163282.2	NT	Homo sapiens chromosome 21 segment HS21C082
2013	14595	27157	0.97	1.0E-07	AL163213.2	NT	Homo sapiens chromosome 21 segment HS21C013
2013	14595	27158	0.97	1.0E-07	AL163213.2	NT	Homo sapiens chromosome 21 segment HS21C013
2424	14692	27565	0.93	1.0E-07	P10263	SWISSPROT	RETROVIRUS-RELATED GAG POLYPROTEIN (VERSION 1)
2854	14162	26663	2.94	1.0E-07	P08256	SWISSPROT	GLYCOPROTEIN GPV
3807	13744		1.22	1.0E-07	AL163282.2	NT	Homo sapiens chromosome 21 segment HS21C082
4380	16967	29413	2.75	1.0E-07	AV718662.1	EST_HUMAN	AV718662 GLC Homo sapiens cDNA clone GLCFNF04 5'
4380	16967	29414	2.75	1.0E-07	AV718662.1	EST_HUMAN	AV718662 GLC Homo sapiens cDNA clone GLCFNF04 5'
8627	19223	32028	1.57	1.0E-07	U82671.2	NT	Homo sapiens chromosome Xq28 melanoma antigen family A2a (MAGEA2A), melanoma antigen family A12 (MAGEA12), melanoma antigen family A2b (MAGEA2B), melanoma antigen family A3 (MAGEA3), calretinin (CALT), NAD(P)H dehydrogenase-like protein (NSDHL), and LI>
6950	19527	32349	4.57	1.0E-07	BE047871.1	EST_HUMAN	tz43d06.y1 NCI CGAP_Bm52 Homo sapiens cDNA clone IMAGE:2291339 5'
6950	19527	32350	4.57	1.0E-07	BE047871.1	EST_HUMAN	tz43d06.y1 NCI CGAP_Bm52 Homo sapiens cDNA clone IMAGE:2291339 5'
7504	20026	32890	8.82	1.0E-07	N55081.1	EST_HUMAN	y43c07.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:245484 3'
7644	20156	33042	0.82	1.0E-07	BF375909.1	EST_HUMAN	PM4-TN0024-030800-002-b05 TN0024 Homo sapiens cDNA
7644	20156	33043	0.82	1.0E-07	BF375909.1	EST_HUMAN	PM4-TN0024-030800-002-b05 TN0024 Homo sapiens cDNA
7669	20181	33088	1.35	1.0E-07	AL163281.2	NT	Homo sapiens chromosome 21 segment HS21C081
8157	20698	33611	2.52	1.0E-07	P97435	SWISSPROT	ENTEROPEPTIDASE (ENTEROKINASE)
8157	20698	33612	2.52	1.0E-07	P97435	SWISSPROT	ENTEROPEPTIDASE (ENTEROKINASE)
8884	21422	34347	2.7	1.0E-07	AA69376.1	EST_HUMAN	z51e10.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:434346 3'
9194	21711	34654	1.05	1.0E-07	P57110	SWISSPROT	ADAM-TS 8 PRECURSOR (A DISINTEGRIN AND METALLOPROTEINASE WITH THROMBOSPONDIN MOTIFS 8) (ADAMTS-8) (ADAM-TS8) (METH-2)
9535	22035	34995	0.49	1.0E-07	BE327943.1	EST_HUMAN	hu28h06.x1 NCI CGAP_Mel15 Homo sapiens cDNA clone IMAGE:3171419 3' similar to contains MER18.13
9849	22347	35329	2.51	1.0E-07	BF674524.1	EST_HUMAN	MER18 repetitive element ;
9855	22353	35334	1.19	1.0E-07	AA386311.1	EST_HUMAN	EST185054 Brain IV Homo sapiens cDNA
10362	22856		3.53	1.0E-07	AL163282.2	NT	Homo sapiens chromosome 21 segment HS21C082

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12013	24860	30704	2.42	1.0E-07	BE048770.1	EST_HUMAN	hr53c11.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3132212 3' similar to TR:O95722 O95722
7325	19852	32714	0.87	9.0E-08	AI539362.1	EST_HUMAN	DJ11633.1.1;
9802	23300	35285	2.1	9.0E-08	AV734819.1	EST_HUMAN	test1606.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2090195 3'
							AV734819 cda Homo sapiens cDNA clone cdABFB06 5'
11061	23573	36610	3.41	9.0E-08	AI891052.1	EST_HUMAN	wn30a07.x1 NCI_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2446932 3' similar to contains OFR.12
11519	23987	37039	4.51	9.0E-08	AL163301.2	NT	OFR repetitive element;
11661	24283		2.98	9.0E-08	AJ251973.1	NT	Homo sapiens chromosome 21 segment HS21C101
635	15420		2.27	8.0E-08	AI911352.1	EST_HUMAN	Homo sapiens partial steirin-1 gene
1088	13683		0.79	8.0E-08	BE795469.1	EST_HUMAN	wd16b05.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2328273 3'
3598	16202		1.05	8.0E-08	BE795469.1	EST_HUMAN	601590133F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3943978 5'
							601590133F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3943978 5'
8674	21213	34133	3.54	8.0E-08	AI752367.1	EST_HUMAN	cn15c02.x1 Normal Human Trabecular Bone Cells Homo sapiens cDNA clone NHTBC_cn15c02 random
8674	21213	34134	3.54	8.0E-08	AI752367.1	EST_HUMAN	cn15c02.x1 Normal Human Trabecular Bone Cells Homo sapiens cDNA clone NHTBC_cn15c02 random
9545	22045	35006	3.32	8.0E-08	AW970693.1	EST_HUMAN	EST382776 MAGE resequences, MAGK Homo sapiens cDNA
11124	23632		2.81	8.0E-08	AF253417.1	NT	Homo sapiens microsomal epoxide hydrolase (EPHX1) gene, complete cds
84	12760	25243	2.82	7.0E-08	Q02357	SWISSPROT	ANKYRIN 1 (ERYTHROCYTE ANKYRIN)
1405	13998	26527	11.08	7.0E-08	X04809.1	NT	Rat mRNA for ribosomal protein L31
3635	16238	28713	0.7	7.0E-08	P15305	SWISSPROT	DYNEIN HEAVY CHAIN (DYHC)
3635	16238	28714	0.7	7.0E-08	P15305	SWISSPROT	DYNEIN HEAVY CHAIN (DYHC)
4002	16600	29073	0.89	7.0E-08	P01606	SWISSPROT	IG KAPPA CHAIN V-J REGION OU
4002	16600	29074	0.89	7.0E-08	P01606	SWISSPROT	IG KAPPA CHAIN V-J REGION OU
10893	23223		6.5	7.0E-08	AI535743.1	EST_HUMAN	cong3.P11.A5 contom Homo sapiens cDNA 3'
11523	23971	37041	6.1	7.0E-08	U24070.1	NT	Rattus norvegicus Munc13-1 mRNA, complete cds
12450	16238	28713	3.59	7.0E-08	P15305	SWISSPROT	DYNEIN HEAVY CHAIN (DYHC)
12450	16238	28714	3.59	7.0E-08	P15305	SWISSPROT	DYNEIN HEAVY CHAIN (DYHC)
850	13466	25974	3.81	6.0E-08	AL163248.2	NT	Homo sapiens chromosome 21 segment HS21C048
850	13466	25975	3.81	6.0E-08	AL163248.2	NT	Homo sapiens chromosome 21 segment HS21C048
2401	14969	27543	2.01	6.0E-08	BE144398.1	EST_HUMAN	MRO-HT0166-191199-004-g09 HT0166 Homo sapiens cDNA
4334	16921	26363	1.14	6.0E-08	AL163248.2	NT	Homo sapiens chromosome 21 segment HS21C048
7892	20434		0.68	6.0E-08	P08547	SWISSPROT	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
							ch56c05.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1335368 3' similar to contains
9251	21777		0.6	6.0E-08	AA827075.1	EST_HUMAN	MER12.b3 MER12 repetitive element;

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Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11293	23745	36802	2.61	6.0E-08	P11369	SWISSPROT	RETROVIRUS-RELATED POLYPROTEIN [CONTAINS: REVERSE TRANSCRIPTASE ; ENDONUCLEASE]
11407	23858		1.77	6.0E-08	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C008
88	12764	25247	2.33	5.0E-08	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
2277	14851	27429	1.23	5.0E-08	AA493851.1	EST_HUMAN	h03b09.s1 NCI_CGAP_Thyl Homo sapiens cDNA clone IMAGE:843193 similar to contains Alu repetitive element
11692	24107		7.32	5.0E-08	P06681	SWISSPROT	COMPLEMENT C2 PRECURSOR (C3/C5 CONVERTASE)
11888	24233	31004	1.48	5.0E-08	AW851878.1	EST_HUMAN	QV0-CT0225-131099-034-e12 CT0225 Homo sapiens cDNA
1797	14387	26831	1.53	4.0E-08	P25723	SWISSPROT	DORSAL-VENTRAL PATTERNING TOLLOID PROTEIN PRECURSOR
1797	14387	26832	1.53	4.0E-08	P25723	SWISSPROT	DORSAL-VENTRAL PATTERNING TOLLOID PROTEIN PRECURSOR
2910	15527		1.49	4.0E-08	AL079581.1	EST_HUMAN	DKFZp434J0428_r1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434J0428 5'
3100	15715		1.01	4.0E-08	AI078417.1	EST_HUMAN	cc05602.x1 Soares_fetal_liver_spleen_INFLS_S1 Homo sapiens cDNA clone IMAGE:1674458 3' similar to contains Alu repetitive element
3988	18584	28055	0.67	4.0E-08	U82668.1	NT	Homo sapiens shox gene, alternatively spliced products, complete cds
6537	19136	31929	1.14	4.0E-08	P52624	SWISSPROT	URIDINE PHOSPHORYLASE (UDRPASE)
8733	21272	34192	0.57	4.0E-08	O15393	SWISSPROT	TRANSMEMBRANE PROTEASE, SERINE 2
9066	21603	34533	0.92	4.0E-08	L42571.1	NT	Cricetulus griseus ribosomal transcription factor (UBF2) mRNA, complete cds
9563	22063		0.87	4.0E-08	P08547	SWISSPROT	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
10233	22728		0.71	4.0E-08	AI016342.1	EST_HUMAN	ct78d12.s1 Soares_total_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:1622803 3'
10287	22782	35774				EST_HUMAN	an22d10.x1 Gessler Wilms tumor Homo sapiens cDNA clone IMAGE:1899411 3' similar to contains Alu repetitive element, contains element MER22 repetitive element
10782	23306		1.7	4.0E-08	AJ238617.1	NT	Homo sapiens mRNA for UGA suppressor tRNA-associated antigenic protein (tRNA 48 gene)
10968	23483	36510	3.7	4.0E-08	BF682493.1	EST_HUMAN	602248024F1 NIH_MGC_62 Homo sapiens cDNA clone IMAGE:4333300 5'
10988	23483	38511	3.7	4.0E-08	BF682493.1	EST_HUMAN	602248024F1 NIH_MGC_62 Homo sapiens cDNA clone IMAGE:4333300 5'
11697	25022		1.4	4.0E-08	W76159.1	EST_HUMAN	zd65p03.r1 Soares_fetal_heart_NbHH19W Homo sapiens cDNA clone IMAGE:345556 5' similar to contains L1.t1 L1 repetitive element
12378	24546		3.48	4.0E-08	AI343353.1	EST_HUMAN	fb95a11.x1 NCI_CGAP_Cor16 Homo sapiens cDNA clone IMAGE:2062076 3' similar to contains MER18.53
5795	18420	31136	3.12	3.0E-08	BE018348.1	EST_HUMAN	bb79a10.y1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3048570 5' similar to TR:Q9Z158 Q9Z158
7052	18071	30462	3.77	3.0E-08	AI792737.1	EST_HUMAN	SYNTAXIN 17.
7545	20065	32839	1.41	3.0E-08	AL163246.2	NT	qs76f11.y5 NCI_CGAP_Pt28 Homo sapiens cDNA clone IMAGE:1944045 5'
							Homo sapiens chromosome 21 segment HS21C048

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7730	20238		4.17	3.0E-08	AI436352.1	EST_HUMAN	th93h09.x1 Soares_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:2126273 3' similar to TR:Q13537 Q13537 MER37 TRANSPOSABLE ELEMENT, COMPLETE CONSENSUS SEQUENCE. ;
9812	22310		0.51	3.0E-08	AF055066.1	NT	Homo sapiens MHC class 1 region
11682	24087		38.65	3.0E-08	R18420.1	EST_HUMAN	yg0204.r1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:30948 5' similar to contains Alu repetitive element.
220	12881		6.74	2.0E-08	AW302898.1	EST_HUMAN	pr87f06.x1 NCI_CGAP_Lu28 Homo sapiens cDNA clone IMAGE:2767139 3'
247	12907		6.48	2.0E-08	AA425598.1	EST_HUMAN	zw48f07.r1 Soares_tetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:773317 5' similar to contains Alu repetitive element; contains element MER15 repetitive element ;
522	13154	25637	2.59	2.0E-08	AF198349.1	NT	Gallus gallus Dach2 protein (Dach2) mRNA, complete cds
688	13312	25796	10.99	2.0E-08	AW886438.1	EST_HUMAN	MR0-OT0080-240200-001-g08 OT0080 Homo sapiens cDNA
688	13312	25797	10.99	2.0E-08	AW886438.1	EST_HUMAN	MR0-OT0080-240200-001-g08 OT0080 Homo sapiens cDNA
1027	13638		22.66	2.0E-08	BE280477.1	EST_HUMAN	601155321F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3138893 5'
1387	13981	26508	2.09	2.0E-08	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047
1777	14387		1.3	2.0E-08	BE734871.1	EST_HUMAN	601570463F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3845199 5'
1895	14480		4.85	2.0E-08	AW270271.1	EST_HUMAN	xp43f11.x1 NCI_CGAP_HN11 Homo sapiens cDNA clone IMAGE:2743149 3'
2462	15029	27597	0.87	2.0E-08	AA731948.1	EST_HUMAN	mw64h01.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1251409 3' similar to contains L1.13 L1 repetitive element ;
2560	15143		2.21	2.0E-08	K00216.1	NT	Sheep His-RNA-GUG
3243	15855	28337	6.85	2.0E-08	O42280	SWISSPROT	WNT-14 PROTEIN PRECURSOR
3243	15855	28338	6.85	2.0E-08	O42280	SWISSPROT	WNT-14 PROTEIN PRECURSOR
3928	16524		1.93	2.0E-08	AW813620.1	EST_HUMAN	RC3-ST0197-161086-012-b03 ST0197 Homo sapiens cDNA
4152	16744	29198	0.57	2.0E-08	U82668.1	NT	Homo sapiens shox gene, alternatively spliced products, complete cds
4494	17079		1.74	2.0E-08	AA458040.1	EST_HUMAN	sa28c07.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:814380 5' similar to contains L1.12 L1 repetitive element ;
5092	17665		3.83	2.0E-08	AW572881.1	EST_HUMAN	he17h08.x2 NCI_CGAP_CML1 Homo sapiens cDNA clone IMAGE:2919327 3' similar to contains Alu repetitive element ;
5817	18441	31163	0.87	2.0E-08	AA813204.1	EST_HUMAN	al90f11.s1 Soares_testis_NHT Homo sapiens cDNA clone 1377189 3'
5998	18618	31354	0.87	2.0E-08	AW088924.1	EST_HUMAN	xd32c04.x1 NCI_CGAP_Ov23 Homo sapiens cDNA clone IMAGE:2595462 3' similar to contains MER18.b3
7946	20483	33398	1.07	2.0E-08	P10272	SWISSPROT	MER18 MER18 repetitive element ;
8054	20598	33503	1.2	2.0E-08	AA490121.1	EST_HUMAN	POL POLYPROTEIN [CONTAINS: PROTEASE; REVERSE TRANSCRIPTASE; ENDONUCLEASE]
9014	21551		1.41	2.0E-08	AU139978.1	EST_HUMAN	ab02g06.s1 Stragene fetal retina 837202 Homo sapiens cDNA clone IMAGE:839674 3'
							AU139978 PLACE1 Homo sapiens cDNA clone PLACE1011719 5'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10413	22807	35904	0.78	2.0E-08	N78087.1	EST_HUMAN	y7202.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:248283 5' similar to contig1
10413	22807	35905	0.78	2.0E-08	N78087.1	EST_HUMAN	LTR1.b3 LTR1 repetitive element;
11882	24293		1.74	2.0E-08	AL163284.2	NT	y7202.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:248283 5' similar to contains LTR1.b3 LTR1 repetitive element;
12559	25073		1.44	2.0E-08	AF280107.1	NT	Homo sapiens chromosome 21 segment HS21C084
1812	14402	26947	0.89	1.0E-08	AF125348.1	NT	Homo sapiens cytochrome P450 polypeptide 43 (CYP3A43) gene, partial cds; cytochrome P450 polypeptide 4 (CYP3A4) and cytochrome P450 polypeptide 7 (CYP3A7) genes, complete cds; and cytochrome P450 polypeptide 5 (CYP3A5) gene, partial cds
2095	14874		2.74	1.0E-08	BE141859.1	EST_HUMAN	Homo sapiens caveolin 1 (CAV1) gene, exon 3 and partial cds
5785	18410	31128	4.23	1.0E-08	AJ010770.1	NT	PM2-HT0130-150989-001-112 HT0130 Homo sapiens cDNA
7746	20254	33148	1.14	1.0E-08	P18474	SWISSPROT	Homo sapiens hyperion gene, exons 1-50
7878	20520	33428	0.55	1.0E-08	AL163302.2	NT	62 KD RO PROTEIN (SJOGREN SYNDROME TYPE A ANTIGEN (SS-A)) (RO(SS-A))
8070	20612	33525	0.85	1.0E-08	AF224688.1	NT	Homo sapiens chromosome 21 segment HS21C102
8070	20612	33526	0.86	1.0E-08	AF224689.1	NT	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
8484	21023	33940	1.84	1.0E-08	AI015304.1	EST_HUMAN	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
9132	21687	34608	0.75	1.0E-08	BE072572.1	EST_HUMAN	cd35a05.s1 Soares testis NHT Homo sapiens cDNA clone IMAGE:1618738 3'
9876	22373	35350	1.18	1.0E-08	P79110	SWISSPROT	PM2-BT0546-210100-004-402 BT0546 Homo sapiens cDNA
10449	22943	35953	0.64	1.0E-08	P98083	SWISSPROT	TRICARBOXYLATE TRANSPORT PROTEIN PRECURSOR (CITRATE TRANSPORT PROTEIN) (CTP)
11185	23700	36751	3.79	1.0E-08	AF044083.1	NT	(TRICARBOXYLATE CARRIER PROTEIN)
12081	24353		2.27	1.0E-08	X51755.1	NT	BONE MORPHOGENETIC PROTEIN 1 PRECURSOR (BMP-1)
4327	18913	28356	3.93	9.0E-09	AL163279.2	NT	Homo sapiens major histocompatibility locus class III region
4327	18913	28357	3.93	9.0E-09	AL163279.2	NT	Human lamda-immunoglobulin constant region complex (germline)
8974	22469		0.49	9.0E-09	T97850.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C079
7308	19838	32894	8.63	8.0E-09	AI183500.1	EST_HUMAN	yes6a12.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:121918 3'
7842	20484	33398	2.88	8.0E-09	AW900158.1	EST_HUMAN	q442607.x1 Soares fetal heart NBH1H18W Homo sapiens cDNA clone IMAGE:1732164 3' similar to contains MSR1.11 MSR1 repetitive element;
8919	21457		2.77	8.0E-09	AA838982.1	EST_HUMAN	CMO-NN1004-100300-273-606 NN1004 Homo sapiens cDNA
3687	16288		1.87	7.0E-09	D86942.1	NT	op74408.s1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1582575 3'
4080	16676		1	7.0E-09	U60871.1	NT	Homo sapiens DNA for 3-ketacyl-CoA thioase beta-subunit of mitochondrial trifunctional protein, exon 2, 3 Human familial Alzheimer's disease (STM2) gene, complete cds

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7843	20385		0.5	7.0E-09	BF108755.1	EST_HUMAN	7145e10.x1 Soares NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3524443 3' similar to contains MER29.b2 MER29 repetitive element;
7891	20533		0.78	7.0E-09	AA256200.1	EST_HUMAN	zr80c05.r1 Soares NIHMPu_S1 Homo sapiens cDNA clone IMAGE:681892 5' similar to contains L1.12 L1 repetitive element;
9184	21701	34844	2.89	7.0E-09	L09709.1	NT	Human lysosomal membrane glycoprotein-2 (LAMP2) gene, 5' end and flanking region
10086	22581	35574	1.3	7.0E-09	BE254850.1	EST_HUMAN	601111173F1 NIH_MGC_18 Homo sapiens cDNA clone IMAGE:3351834 5'
10248	22743		0.63	7.0E-09	AA058628.1	EST_HUMAN	z58a07.s1 Soares retina N2b4HR Homo sapiens cDNA clone IMAGE:381156 3' similar to contains L1.12 L1 repetitive element;
10552	23089		2.78	7.0E-09	T97950.1	EST_HUMAN	ye58a12.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:121918 3'
2198	14774		1.18	6.0E-09	AL040439.1	EST_HUMAN	DKFZp434C0514_r1 434 (synonym: h1as3) Homo sapiens cDNA clone DKFZp434C0514 5'
5116	17688	30126	5.44	6.0E-09	BE169421.1	EST_HUMAN	PM1-HT0527-160200-001-H05 HT0527 Homo sapiens cDNA
5248	17810	30232	1	6.0E-09	AW593471.1	EST_HUMAN	hg16f12.x1 NCL CGAP_GC8 Homo sapiens cDNA clone IMAGE:2845807 3' similar to gb:X53743 FIBULIN-1, ISOFORM C PRECURSOR (HUMAN);
5248	17810	30233	1	6.0E-09	AW593471.1	EST_HUMAN	hg16f12.x1 NCL CGAP_GC6 Homo sapiens cDNA clone IMAGE:2845807 3' similar to gb:X53743 FIBULIN-1, ISOFORM C PRECURSOR (HUMAN);
5582	18213	30682	12.11	6.0E-09	AW195784.1	EST_HUMAN	xn85h08.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2701311 3'
8512	21051	33973	0.81	6.0E-09	BE161653.1	EST_HUMAN	MR3-HT0446-260300-201-H12 HT0446 Homo sapiens cDNA
9103	21638	34578	2.37	6.0E-09		NT	Homo sapiens fibroblast growth factor receptor 3 (achondroplasia, thanatophoric dwarfism) (FGFR3) mRNA
10177	22672		3.89	6.0E-09	AF200823.2	NT	Homo sapiens testis-specific kinase substrate (TSKS) gene, complete cds
10610	23143	36154	1.68	6.0E-09	BF108755.1	EST_HUMAN	7145e10.x1 Soares NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3524443 3' similar to contains MER29.b2 MER29 repetitive element;
1480	14052	26584	3.95	5.0E-09	BE148284.1	EST_HUMAN	RC2-HT0252-120200-014-H10 HT0252 Homo sapiens cDNA
1893	14478	27038	0.93	5.0E-09	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
6542	19141	31933	2.28	5.0E-09	AA359454.1	EST_HUMAN	EST68746 Fetal lung II Homo sapiens cDNA 5' end
8521	21080	33983	0.59	5.0E-09	P37071	SWISSPROT	OLFACTORY RECEPTOR-LIKE PROTEIN COR5
10007	22502	35493	2.27	5.0E-09	AW799667.1	EST_HUMAN	PM2-UM0053-240300-005-c09 UM0053 Homo sapiens cDNA
547	13178		1.69	4.0E-09	AL163282.2	NT	Homo sapiens chromosome 21 segment HS21C082
1000	13611		1.99	4.0E-09	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
1518	14110	26846	1.81	4.0E-09	9558718	NT	Homo sapiens hypothetical protein (AF038168), mRNA
2473	15040	27808	4.54	4.0E-09	AA350878.1	EST_HUMAN	EST58385 Infant brain Homo sapiens cDNA 5' end similar to similar to heat shock protein, 90 kDa
7788	20331	33237	0.72	4.0E-09	AA485747.1	EST_HUMAN	zr04c08.r1 Soares NIHMPu_S1 Homo sapiens cDNA clone IMAGE:768298 5'
8459	20999	33915	0.62	4.0E-09	T64942.1	EST_HUMAN	yd11a07.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:66804 3'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10996	23510		1.73	4.0E-09	AA195142.1	EST_HUMAN	234a12.r1 Soares_NHMPu_S1 Homo sapiens cDNA clone IMAGE:665278 5' similar to gb:L07807 DYNAMIN-1 (HUMAN);
2390	14958	27530	6.63	3.0E-09	BE222239.1	EST_HUMAN	hu09e09.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3166120 3' similar to contains MER18.13 MER18 repetitive element;
2589	15151	27717	0.95	3.0E-09	BE222239.1	EST_HUMAN	hu09e09.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3166120 3' similar to contains MER18.13 MER18 repetitive element;
2677	15235	27802	1.22	3.0E-09	P23249	SWISSPROT	PROTEIN MOV-10
3372	15980	28457	1.05	3.0E-09	BE222239.1	EST_HUMAN	hu09e09.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3166120 3' similar to contains MER18.13 MER18 repetitive element;
3423	16031		3.13	3.0E-09	AA442272.1	EST_HUMAN	234a12.r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:757422 5'
4172	16763		3.54	3.0E-09	X16674.1	NT	H. sapiens PADPRP-1 gene for NAD(+) ADP-ribosyltransferase
4517	17101	28548	5.18	3.0E-09	AF175325.1	NT	Homo sapiens eukaryotic initiation factor 4A1 (EIF4A1) gene, partial cds
4610	17193	28639	1.52	3.0E-09	Q9Y3R5	SWISSPROT	258.1 KDA PROTEIN C21ORF5 (KIAA0533)
7841	20383	33287	1.29	3.0E-09	BE465780.1	EST_HUMAN	hu08a02.x1 NCL_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3194090 3' similar to TR:O55091 O55091 IMPACT PROTEIN.;
10146	22641	35631	1.98	3.0E-09	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047
10900	23420	36437	3.87	3.0E-09	BF109943.1	EST_HUMAN	7172c08.x1 Soares_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3527030 3'
10900	23420	36438	3.87	3.0E-09	BF109943.1	EST_HUMAN	7172c08.x1 Soares_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3527030 3'
845	13461		1.01	2.0E-09	X16674.1	NT	H. sapiens PADPRP-1 gene for NAD(+) ADP-ribosyltransferase
1301	13895	26417	6.02	2.0E-09	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
1698	14291		10.31	2.0E-09	AL116573.1	EST_HUMAN	DKFZp781B1710_r1 761 (synonym: ham2) Homo sapiens cDNA clone DKFZp781B1710 5'
2364	14935	27507	2.79	2.0E-09	Q9Y3R5	SWISSPROT	258.1 KDA PROTEIN C21ORF5 (KIAA0533)
4011	16609	29082	4.13	2.0E-09	O60241	SWISSPROT	BRAIN-SPECIFIC ANGIOGENESIS INHIBITOR 2 PRECURSOR
4083	16679	29139	0.94	2.0E-09	AI263479.1	EST_HUMAN	q107d09.x1 Soares_NHMPu_S1 Homo sapiens cDNA clone IMAGE:1855793 3'
6876	19810		0.74	2.0E-09	AA357407.1	EST_HUMAN	EST166142 Kidney IX Homo sapiens cDNA 5' end similar to EST containing L1 repeat
7474	19996	32861	8.48	2.0E-09	AA461430.1	EST_HUMAN	2363h06.r1 Soares_cclal_fetus_Nb2HF8_9W Homo sapiens cDNA clone IMAGE:796187 5' similar to contains Alu repetitive element;
7532	20052	32925	0.68	2.0E-09	W28634.1	EST_HUMAN	52d11 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA
8646	21185	34104	1.72	2.0E-09	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region: segment 1/2
11634	24074		1.72	2.0E-09	AF111168.2	NT	Homo sapiens serine palmitoyl transferase, subunit II gene, complete cds, and unknown genes
12238	13461		27.08	2.0E-09	X16674.1	NT	H. sapiens PADPRP-1 gene for NAD(+) ADP-ribosyltransferase
12310	25094		2.25	2.0E-09	AA226070.1	EST_HUMAN	nc11c02.r1 NCL_CGAP_P11 Homo sapiens cDNA clone IMAGE:1007610 similar to contains Alu repetitive element;

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1032	13642		1.14	1.0E-09	W78152.1	EST_HUMAN	z678d03.s1 Soares_fetal_heart_NHH19W Homo sapiens cDNA clone IMAGE:346853 3' similar to gb:L02932 PEROXISOME PROLIFERATOR ACTIVATED RECEPTOR ALPHA (HUMAN);
1148	13751	26260	2.3	1.0E-09	5031624	NT	Homo sapiens CCAAT-box-binding transcription factor (CBF2) mRNA
1148	13751	26261	2.3	1.0E-09	5031624	NT	Homo sapiens CCAAT-box-binding transcription factor (CBF2) mRNA
2814	15531	28003	1.74	1.0E-09	U80017.1	NT	Homo sapiens basic transcription factor 2 p44 (btf2p44) gene, partial cds, neuronal apoptosis inhibitory protein (naip) and survival motor neuron protein (smn) genes, complete cds
2952	15568	28042	3.98	1.0E-09	M28699.1	NT	Homo sapiens nuclear phosphoprotein B23 (NPM1) mRNA, complete cds
2952	15568	28043	3.98	1.0E-09	M28699.1	NT	Homo sapiens nuclear phosphoprotein B23 (NPM1) mRNA, complete cds
3073	15688	28180	0.77	1.0E-09	BE535440.1	EST_HUMAN	601058602F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3445177 5'
4916	17491		5.48	1.0E-09	AA719297.1	EST_HUMAN	zh35b03.s1 Soares_pituitary_gland_N3HPG Homo sapiens cDNA clone IMAGE:414029 3' similar to contains Alu repetitive element; contains element MER22 repetitive element ;
5694	18320	30819	0.87	1.0E-09	AL163283.2	NT	Homo sapiens chromosome 21 segment HS21C083
5698	18616	31352	1.46	1.0E-09	U07000.1	NT	Human breakpoint cluster region (BCR) gene, complete cds
6293	18901	31871	3.17	1.0E-09	P26694	SWISSPROT	CIRCUMSPOROZOITE PROTEIN PRECURSOR (CS)
8328	20870	33784	0.87	1.0E-09	AI88474.1	EST_HUMAN	w439b05.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2330481 3' similar to contains MER25.11 MER25 repetitive element ;
10216	22711		2.57	1.0E-09	AL163283.2	NT	Homo sapiens chromosome 21 segment HS21C083
12136	25032	30820	3.3	1.0E-09	11418127	NT	Homo sapiens GTP binding protein 1 (GTPBP1), mRNA
12593	24944		1.82	1.0E-09	AF260225.1	NT	Homo sapiens TESTIN 2 and TESTIN 3 genes, complete cds, alternatively spliced
1352	13947	26471	1.48	9.0E-10	AW867740.1	EST_HUMAN	MRO-SN0040-050500-002-c07 SN0040 Homo sapiens cDNA
2860	15478	27955	6.87	9.0E-10	AI870071.1	EST_HUMAN	we78h03.x1 Soares_Dieckgraefe_color_NHCD Homo sapiens cDNA clone IMAGE:2347253 3' similar to SW:RL29_HUMAN P47914 60S RIBOSOMAL PROTEIN L29 ; contains element P TR5 repetitive element ;
6922	19581	32410	4.35	9.0E-10	AI452982.1	EST_HUMAN	y46b09.x1 Soares_NSIF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:2144537 3' similar to TR:O00372 O00372 PUTATIVE P150. ;
158	12821	25309	10.47	8.0E-10	U63630.2	NT	Homo sapiens MCM4 (MCM4) and DNA-PKcs (PRKDC) genes, partial cds
3386	15995	28472	0.58	8.0E-10	BE080748.1	EST_HUMAN	QV1-BT0031-150200-071-f01 BT0031 Homo sapiens cDNA
4279	16985	28311	4.11	8.0E-10	AA376832.1	EST_HUMAN	EST89584 Small intestine I Homo sapiens cDNA 5' end
9875	22372		2.34	8.0E-10	U36309.2	NT	Homo sapiens lens major intrinsic protein (MIP) gene, complete cds
730	13350	25844	24.84	7.0E-10	7706228	NT	Homo sapiens TPA Inducible protein (LOC51586), mRNA
730	13350	25845	24.84	7.0E-10	Q13342	SWISSPROT	Homo sapiens TPA Inducible protein (LOC51586), mRNA
1663	14256	26791	2.13	7.0E-10	P08548	SWISSPROT	LYSP100 PROTEIN (LYMPHOID-RESTRICTED HOMOLOG OF SP100)
2087	14847		1.31	7.0E-10	P08548	SWISSPROT	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
2594	15156		13	7.0E-10	P08547	SWISSPROT	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3124	15738	28206	2.84	7.0E-10	X00856.1	NT	H. sapiens DHFR gene, exon 3
6332	18938	31714	5.26	7.0E-10	AA345220.1	EST_HUMAN	EST51247 Gall bladder II Homo sapiens cDNA 5' end
7446	19970	32838	1.2	7.0E-10	BF352883.1	EST_HUMAN	IL3-HT0619-110700-209-D12 HT0619 Homo sapiens cDNA
7652	20164		1.43	7.0E-10	P35084	SWISSPROT	DNA-DIRECTED RNA POLYMERASE II LARGEST SUBUNIT
7916	20458	33364	1.68	7.0E-10	AF028701.2	NT	Homo sapiens presenilin-1 gene, exons 1 and 2
7916	20458	33365	1.68	7.0E-10	AF028701.2	NT	Homo sapiens presenilin-1 gene, exons 1 and 2
10212	22707	35701	0.57	7.0E-10	L08895.1	NT	Homo sapiens MADS/MEF2-family transcription factor (MEF2C) mRNA, complete cds
11511	23959	37030	1.54	7.0E-10	AW778769.1	EST_HUMAN	ho12802.x1 NCI_CGAP_Cot14 Homo sapiens cDNA clone IMAGE:3037202 3' similar to contains Alu repetitive element; contains MER7 b1 MER7 repetitive element;
946	13559	26072	3.68	6.0E-10	AJ400877.1	NT	Homo sapiens ASCL3 gene, CEGP1 gene, C11orf14 gene, C11orf15 gene, C11orf16 gene and C11orf17 gene
2702	15259	27827	1.89	6.0E-10	AI424405.1	EST_HUMAN	IF02607.x1 NCI_CGAP_P28 Homo sapiens cDNA clone IMAGE:2095021 3'
4847	17425		2.15	6.0E-10	AW553719.1	EST_HUMAN	RC3-C10254-031099-012-g12 C10254 Homo sapiens cDNA
8718	21257	34177	0.94	6.0E-10	P33730	SWISSPROT	E-SELECTIN PRECURSOR (ENDOTHELIAL LEUKOCYTE ADHESION MOLECULE 1) (ELAM-1)
8718	21257	34178	0.94	6.0E-10	P33730	SWISSPROT	(LEUKOCYTE-ENDOTHELIAL CELL ADHESION MOLECULE 2) (LECAM2) (CD62E)
9552	22052	35015	0.52	6.0E-10	P66073	SWISSPROT	E-SELECTIN PRECURSOR (ENDOTHELIAL LEUKOCYTE ADHESION MOLECULE 1) (ELAM-1)
11731	24136		1.47	6.0E-10	AW971923.1	EST_HUMAN	(LEUKOCYTE-ENDOTHELIAL CELL ADHESION MOLECULE 2) (LECAM2) (CD62E)
792	13410		5.2	5.0E-10	AL046804.1	EST_HUMAN	ENTEROPEPTIDASE PRECURSOR (ENTEROKINASE)
3522	16127	28607	0.96	5.0E-10	Q01033	SWISSPROT	ENTEROPEPTIDASE PRECURSOR (ENTEROKINASE)
5002	17575	30018	1.05	5.0E-10	AW028877.1	EST_HUMAN	EST384012 MAGE sequences, MAGL Homo sapiens cDNA
5002	17575	30019	1.05	5.0E-10	AW028877.1	EST_HUMAN	DKFZp434N219_r1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434N219.5
5128	17700	30134	1.37	5.0E-10	AF181897.1	NT	HYPOTHETICAL GENE 48 PROTEIN
7363	19889		1.84	5.0E-10	BF105159.1	EST_HUMAN	MER10 repetitive element;
9455	21981	34932	1.65	5.0E-10	P34678	SWISSPROT	MER10 repetitive element;
9455	21981	34933	1.65	5.0E-10	P34678	SWISSPROT	similar to contains LTR8.b2 LTR8 repetitive element;
116	12787		1.02	4.0E-10	AI221083.1	EST_HUMAN	601822184F1 NIH_MGC_75 Homo sapiens cDNA clone IMAGE:4042413 5'
607	13235	25709	0.73	4.0E-10	AA515260.1	EST_HUMAN	HYPOTHETICAL 67.9 KD PROTEIN ZK688.8 IN CHROMOSOME III
2039	14621	27189	1.17	4.0E-10	AW594709.1	EST_HUMAN	HYPOTHETICAL 67.9 KD PROTEIN ZK688.8 IN CHROMOSOME III

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Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2609	15171	27739	4.19	4.0E-10	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
7228	19759	32614	22.35	4.0E-10	AF224669.1	NT	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
10097	22592	35584	0.62	4.0E-10	AW283243.1	EST_HUMAN	U1-H-B12-ah1-e-07-Q-UJ.s1 NCI CGAP Sub4 Homo sapiens cDNA clone IMAGE:2727061 3'
10342	22836	35831	1.01	4.0E-10	AI287342.1	EST_HUMAN	aq63h11.x1 Stanley Frontal SN pool 2 Homo sapiens cDNA clone IMAGE:2035653
948	13560	26074	1.95	3.0E-10	N36113.1	EST_HUMAN	yy3206.s1 Soares melanocyte 2NblHM Homo sapiens cDNA clone IMAGE:272963 3' similar to contains L1.11 L1 repetitive element
1395	13989		4.43	3.0E-10	AY005150.1	NT	Homo sapiens extracellular glycoprotein lacritin precursor, gene, complete cds
4633	17216	29867	1.07	3.0E-10	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
4633	17216	29868	1.07	3.0E-10	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
5646	18274	30748	0.92	3.0E-10	N50109.1	EST_HUMAN	yz11g08.s1 Soares multiple sclerosis 2NBHMP Homo sapiens cDNA clone IMAGE:282782 3'
6350	18955	31734	1.87	3.0E-10	P20350	SWISSPROT	RHOMBOLD PROTEIN (VEINLET PROTEIN)
6492	19093	31877	2.86	3.0E-10	BE302970.1	EST_HUMAN	ba76d08.y1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:29063 19 5'
7737	20245	33136	2.3	3.0E-10	AV743302.1	EST_HUMAN	AV743302 CB Homo sapiens cDNA clone CBFBGD08 5'
7737	20245	33137	2.3	3.0E-10	AV743302.1	EST_HUMAN	AV743302 CB Homo sapiens cDNA clone CBFBGD08 5'
8665	21204	34122	1.08	3.0E-10	H87208.1	EST_HUMAN	ye74b12.s1 Soares retina N2b4HR Homo sapiens cDNA clone IMAGE:220511 3' similar to contains MER29 repetitive element
8979	21517	34442	1.61	3.0E-10	AW850731.1	EST_HUMAN	IL3-CT0219-160200-064-B06 CT0219 Homo sapiens cDNA
8979	21517	34443	1.61	3.0E-10	AW850731.1	EST_HUMAN	IL3-CT0219-160200-064-B06 CT0219 Homo sapiens cDNA
9284	21790		0.96	3.0E-10	AF020503.1	NT	Homo sapiens FRA3B common fragile region, diadenosine triphosphatase hydrolase (FHL1) gene, exon 5
10359	22653		2.13	3.0E-10	T65891.1	EST_HUMAN	yc11e12.r1 Stratagene lung (#637210) Homo sapiens cDNA clone IMAGE:80398 5'
10485	22978		1.71	3.0E-10	AA769284.1	EST_HUMAN	n28g09.s1 NCI CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1289908 3'
12415	24568	30911	3.44	3.0E-10	BE179517.1	EST_HUMAN	IL3-H10618-110500-136-E07 HT0618 Homo sapiens cDNA
38	12717	25176	92.79	2.0E-10	P48988	SWISSPROT	MAJOR CENTROMERE AUTOANTIGEN B (CENTROMERE PROTEIN B) (CENP-B)
38	12717	25177	92.79	2.0E-10	P48988	SWISSPROT	MAJOR CENTROMERE AUTOANTIGEN B (CENTROMERE PROTEIN B) (CENP-B)
1942	14526		2.33	2.0E-10	U80017.1	NT	Homo sapiens basic transcription factor 2 p44 (btf2p44) gene, partial cds, neuronal apoptosis inhibitory protein (naip) and survival motor neuron protein (smn) genes, complete cds
3015	15631		0.86	2.0E-10	BF675047.1	EST_HUMAN	602136640F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4273377 5'
5971	18562		7.24	2.0E-10	Q28640	SWISSPROT	(HPRG)
6398	19001	31779	1.42	2.0E-10	AF280107.1	NT	Homo sapiens cytochrome P450 polypeptide 43 (CYP3A43) gene, partial cds; cytochrome P450 polypeptide 4 (CYP3A4) and cytochrome P450 polypeptide 7 (CYP3A7) genes, complete cds; and cytochrome P450 polypeptide 5 (CYP3A5) gene, partial cds
7414	18639	32803	7.79	2.0E-10	BE791082.1	EST_HUMAN	601586208F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3940824 5'

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Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7956	20498	33407	0.54	2.0E-10	P26809	SWISSPROT	POL POLYPROTEIN [CONTAINS: PROTEASE: REVERSE TRANSCRIPTASE: RIBONUCLEASE H]
7958	20498	33408	0.54	2.0E-10	P26809	SWISSPROT	POL POLYPROTEIN [CONTAINS: PROTEASE: REVERSE TRANSCRIPTASE: RIBONUCLEASE H]
9228	21742		0.85	2.0E-10	BF434585.1	EST_HUMAN	7078d08.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3642303 3' similar to contains L1.13 L1 repetitive element:
1556	14148		2.26	1.0E-10	AW867787.1	EST_HUMAN	MR0-SN0038-280300-001-01 SN0038 Homo sapiens cDNA
1650	14242	28778	2.41	1.0E-10	AV652123.1	EST_HUMAN	AV652123 GLC Homo sapiens cDNA clone GLCXA11 3'
2618	15180		1.78	1.0E-10	AW852001.1	EST_HUMAN	QV0-CT0225-191199-058-608 CT0225 Homo sapiens cDNA
3548	16152	28634	0.73	1.0E-10	AW832912.1	EST_HUMAN	QV2-TT0003-161199-013-g10 TT0003 Homo sapiens cDNA
3583	16197		0.82	1.0E-10	AL041685.1	EST_HUMAN	DKFZp434N1317_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434N1317 5'
3911	16197		0.89	1.0E-10	AL041685.1	EST_HUMAN	DKFZp434N1317_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434N1317 5'
4087	16683		6.83	1.0E-10	AF213884.1	NT	Homo sapiens nuclear factor of kappa light polypeptide gene enhancer in B-cells 1 (NFKB1) gene, complete cbs
4207	18786	29243	5.77	1.0E-10	U52111.2	NT	Homo sapiens X28 region near ALD locus containing dual specificity phosphatase 9 (DUSP9), ribosomal protein L18a (RPL18a), Ca2+/Calmodulin-dependent protein kinase I (CAMKI), creatine transporter (CRTR), CDM protein (CDM), adrenoleukodystrophy protein >
4207	18796	29244	5.77	1.0E-10	U52111.2	NT	Homo sapiens X28 region near ALD locus containing dual specificity phosphatase 9 (DUSP9), ribosomal protein L18a (RPL18a), Ca2+/Calmodulin-dependent protein kinase I (CAMKI), creatine transporter (CRTR), CDM protein (CDM), adrenoleukodystrophy protein >
4214	18803	29253	1.95	1.0E-10	AB031089.1	NT	Homo sapiens POCX1 mRNA for protein containing CXXC domain 1, complete cds
4249	18837		2.53	1.0E-10	M30628.1	NT	Human pregnancy-specific glycoprotein beta-1 (SP1) mRNA, test exon
5343	17904		1	1.0E-10	AI797745.1	EST_HUMAN	we8204.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2347615 3' similar to contains MER31.t1 MER31 repetitive element:
8182	20723	33637	1.06	1.0E-10	AW408690.1	EST_HUMAN	fb_6A4 Fetal brain library Homo sapiens cDNA
8589	21128		1.03	1.0E-10	AI268940.1	EST_HUMAN	qm04e10.x1 NCI_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1880874 3' similar to contains L1.11 L1 repetitive element:
10103	22598		4.16	1.0E-10	AA081888.1	EST_HUMAN	zn23g06.r1 Striatogene neuroepithelium NT2RAM1 937234 Homo sapiens cDNA clone IMAGE:548314 5'
10793	23316	36325	3.47	1.0E-10	AI038280.1	EST_HUMAN	oy65h03.x1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:1672661 3'
11672	18038		1.58	1.0E-10	X87344.1	NT	H.sapiens DNA, DMB, HLA-Z1, IIP2, LMP2, TAP1, LMP7, TAP2, DOB, DOB2 and RING8, 9, 13 and 14 genes
283	12839	25425	0.98	9.0E-11	BE145600.1	EST_HUMAN	IL2-H10203-281089-016-c08 HT0203 Homo sapiens cDNA
2152	14726	27302	6.73	9.0E-11	AL134395.1	EST_HUMAN	DKFZp547D225_r1 547 (synonym: hibr1) Homo sapiens cDNA clone DKFZp547D225 5'
2152	14726	27303	6.73	9.0E-11	AL134395.1	EST_HUMAN	DKFZp547D225_r1 547 (synonym: hibr1) Homo sapiens cDNA clone DKFZp547D225 5'
3430	16038	28520	2.33	9.0E-11	AL134395.1	EST_HUMAN	DKFZp547D225_r1 547 (synonym: hibr1) Homo sapiens cDNA clone DKFZp547D225 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3430	16038	28521	2.33	9.0E-11	AL134395.1	EST_HUMAN	DKFZp547D225_r1 547 (synonym: hbr1) Homo sapiens cDNA clone DKFZp547D225 5'
4598	17182	29629	0.69	9.0E-11	AA775985.1	EST_HUMAN	aa78071.s1 Stratagene schizo brain S11 Homo sapiens cDNA clone IMAGE:970297 3'
5763	18389		3.77	9.0E-11	BE079780.1	EST_HUMAN	RC8-BT0627-140200-011-E06 BT0627 Homo sapiens cDNA
10058	22553	35548	0.98	9.0E-11	AA324980.1	EST_HUMAN	EST27872 Cerebellum II Homo sapiens cDNA 5' end
10058	22553	35548	0.98	9.0E-11	AA324980.1	EST_HUMAN	EST27872 Cerebellum II Homo sapiens cDNA 5' end
12059	24342	30989	3.52	9.0E-11	C16635.1	EST_HUMAN	C16635 Clontech human aorta polyA+ mRNA (#6572) Homo sapiens cDNA clone GEN-508B08 5'
3150	15764		9.38	8.0E-11	H18971.1	EST_HUMAN	yn53f11.s1 Soares adult brain N2b5HB55Y Homo sapiens cDNA clone IMAGE:172173 3' similar to contains L1 repetitive element;
4035	16633	29102	0.68	8.0E-11	A1478617.1	EST_HUMAN	tm54c09.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2161836 3'
4117	16711	29165	5.2	8.0E-11	N23712.1	EST_HUMAN	yy48e06.s1 Weizmann Olfactory Epithelium Homo sapiens cDNA clone IMAGE:255288 3'
1487	14089	28629	2.94	7.0E-11	AA330642.1	EST_HUMAN	EST34392 Embryo, 6 week I Homo sapiens cDNA 5' end
3639	16537	28004	0.94	7.0E-11	AJ277546.2	NT	Homo sapiens WEE1 gene for protein kinase and partial ZNF143 gene for zinc finger transcription factor
8435	20975	33689	2.61	7.0E-11	AF163864.1	NT	Homo sapiens SNCA isoform (SNCA) gene, complete cds, alternatively spliced
10129	22624		1.1	7.0E-11	P11369	SWISSPROT	RETROVIRUS-RELATED POLYPROTEIN [CONTAINS: REVERSE TRANSCRIPTASE ; ENDONUCLEASE]
12208	24430		1.52	7.0E-11	AV701656.1	EST_HUMAN	AV701656 ADB Homo sapiens cDNA clone ADBABC09 5'
437	13070	25566	5.57	6.0E-11	M55270.1	NT	Human matrix Gla protein (MGP) gene, complete cds
437	13070	25567	5.57	6.0E-11	M55270.1	NT	Human matrix Gla protein (MGP) gene, complete cds
6922	19412	32229	1.03	6.0E-11	L44140.1	NT	Homo sapiens chromosome X region from filamin (FLN) gene to glucose-6-phosphate dehydrogenase (G6PD) gene, complete cds
7880	20191	33080	3.29	6.0E-11	P08547	SWISSPROT	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
8305	20846	33769	3.25	6.0E-11	AV727859.1	EST_HUMAN	AV727859 HTC Homo sapiens cDNA clone HTCASC06 5'
12	12691	25147	0.9	5.0E-11	AL163283.2	NT	Homo sapiens chromosome 21 segment HS21C083
3411	12691	25147	1.29	5.0E-11	AL163283.2	NT	Homo sapiens chromosome 21 segment HS21C083
4312	16898	29343	1.04	5.0E-11	P48034	SWISSPROT	ALDEHYDE OXIDASE
6639	19235	32037	3.02	5.0E-11	AL163213.2	NT	Homo sapiens chromosome 21 segment HS21C013
7537	20057	32931	12.3	5.0E-11	11416799	NT	Homo sapiens protocadherin beta 3 (PCDH3), mRNA
1446	14038		1.41	4.0E-11	AA436042.1	EST_HUMAN	zu01b12.r1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:730559 5'
2816	15368	27837	8.36	4.0E-11	BE885900.1	EST_HUMAN	601507531F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3908295 5'
2997	15513	28093	1.17	4.0E-11	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047
4725	17306	29750	0.93	4.0E-11	D44666.1	EST_HUMAN	HUMSUPY069 Human brain cDNA Homo sapiens cDNA clone 069
6802	19189	32005	3.5	4.0E-11	P20095	SWISSPROT	PRE-MRNA SPLICING FACTOR RNA HELICASE PRP2

PCT/US01/00669

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7409	19934		4.06	4.0E-11	AF224669.1	NT	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
9318	21830		1.44	4.0E-11	BE149425.1	EST_HUMAN	RC1-HT0256-210100-013-08 HT0256 Homo sapiens cDNA
9580	22080	35045	0.91	4.0E-11	AI609763.1	EST_HUMAN	tt82g12.x1 NCI_CGAP_Bm23 Homo sapiens cDNA IMAGE:2105830 3' similar to W.P.ZK353.1
12275	24479	30837	1.36	4.0E-11	11545732	NT	CE00385 ;
1538	14130	26666	3.79	3.0E-11	6676077	NT	Homo sapiens SH3-domain binding protein 1 (SH3BP1), mRNA
4363	16950		1.47	3.0E-11	AA303248.1	EST_HUMAN	Mus musculus expressed in non-metastatic cells 2, protein (NM23B) (Nme2), mRNA
995	13807	26121	1.64	2.0E-11	AI150502.1	EST_HUMAN	EST180120 Liver, hepatocellular carcinoma Homo sapiens cDNA 5' end
1227	13826	26342	5.04	2.0E-11	R24807.1	EST_HUMAN	q36c04.x1 Soares, testis, NHT Homo sapiens cDNA clone IMAGE:1752102 3' similar to contains MER1013
1227	13826	26343	5.04	2.0E-11	R24807.1	EST_HUMAN	MER10 repetitive element ;
1655	14247	26780	6.04	2.0E-11	L17432.1	NT	yg43e12.1 Soares infant brain T1NB Homo sapiens cDNA clone IMAGE:35144 5'
1655	14247	26781	6.04	2.0E-11	L17432.1	NT	yg43e12.1 Soares infant brain T1NB Homo sapiens cDNA clone IMAGE:35144 5'
1659	14252	26786	1.09	2.0E-11	AI126371.1	EST_HUMAN	Gallus gallus rho-globin, beta-H globin, beta-A globin, epsilon-globin, and difactory receptor-like protein
3230	15842	28323	6.98	2.0E-11	P10263	SWISSPROT	COR3beta (COR3beta) genes, complete cds
3368	15976	28453	0.76	2.0E-11	AI478617.1	EST_HUMAN	Gallus gallus rho-globin, beta-H globin, beta-A globin, epsilon-globin, and difactory receptor-like protein
3409	16018	28497	0.65	2.0E-11	Q10473	SWISSPROT	COR3beta (COR3beta) genes, complete cds
3544	16148		1.01	2.0E-11	AF020503.1	NT	qc51c10.x1 Soares, pregnant, uterus, NbhPU Homo sapiens cDNA clone IMAGE:1713138 3' similar to
4539	17123		0.89	2.0E-11	BE065537.1	EST_HUMAN	gb.L02992 PEROXISOME PROLIFERATOR ACTIVATED RECEPTOR ALPHA (HUMAN)/contains L1.11
4711	17293		0.95	2.0E-11	AL163227.2	NT	L1 repetitive element ;
5070	17643		1.37	2.0E-11	BE062558.1	EST_HUMAN	RETROVIRUS-RELATED GAG POLYPROTEIN (VERSION 1)
6284	18892	31961	1.2	2.0E-11	AW877806.1	EST_HUMAN	tm54c09.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2161936 3'
6452	19053	31838	2.02	2.0E-11	AA581028.1	EST_HUMAN	POLYPEPTIDE N-ACETYL GALACTOSAMINYLTRANSFERASE (PROTEIN-UDP
7246	18775	32632	0.78	2.0E-11	BF592945.1	EST_HUMAN	ACETYL GALACTOSAMINYLTRANSFERASE (UDP-GALNAC:POLYPEPTIDE, N-
7823	20365		0.66	2.0E-11	P37072	SWISSPROT	ACETYL GALACTOSAMINYLTRANSFERASE (GALNAC-T1)
							Homo sapiens FRA3B common fragile region, diadenosine triphosphate hydrolase (FHT) gene, exon 5
							RC3-BT0316-170200-014-a05 BT0316 Homo sapiens cDNA
							Homo sapiens chromosome 21 segment HS21C027
							QV2-BT0256-261098-014-a01 BT0256 Homo sapiens cDNA
							QV2-PT0073-280300-109-508 PT0073 Homo sapiens cDNA
							nc83h05.1 NCI_CGAP_GC1 Homo sapiens cDNA clone IMAGE:797433 5' similar to SW:PR16_YEAST
							P15938 PRE-MRNA SPLICING FACTOR RNA HELICASE PRP16 ;
							797c03.x1 NCI_CGAP_GC6 Homo sapiens cDNA clone IMAGE:3442665 3'
							OLFACTORY RECEPTOR-LIKE PROTEIN COR6

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9150	21885		1.27	2.0E-11	AF29308.1	NT	Homo sapiens chromosome 9 duplication of the T cell receptor beta locus and trypsinogen gene families
10184	22879	35871	4.6	2.0E-11	Q13606	SWISSPROT	OLFACTORY RECEPTOR 511 (OLFACTORY RECEPTOR-LIKE PROTEIN OLF1)
10409	22803	35899	0.78	2.0E-11	AW895874.1	EST_HUMAN	RC4-OT0072-170400-013-c11 OT0072 Homo sapiens cDNA
10409	22803	35900	0.79	2.0E-11	AW885874.1	EST_HUMAN	RC4-OT0072-170400-013-c11 OT0072 Homo sapiens cDNA
10882	23508	36538	2.41	2.0E-11	AA035369.1	EST_HUMAN	z127g02.s1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:471784 3'
10882	23508	36539	2.41	2.0E-11	AA035369.1	EST_HUMAN	z127g02.s1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:471784 3'
11805	25020		2.8	2.0E-11	AA704195.1	EST_HUMAN	z177e03.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:460924 3'
11838	24200		2.48	2.0E-11	AW842143.1	EST_HUMAN	RC9-CN0027-210100-011-c01 CN0027 Homo sapiens cDNA
11860	24218	31043	2.25	2.0E-11	BF377858.1	EST_HUMAN	CM2-TN0140-070800-372-g01 TN0140 Homo sapiens cDNA
12135	24388		2.03	2.0E-11	D25217.2	NT	Homo sapiens mRNA for KIAA0027 protein, partial cds
12283	24492		5.24	2.0E-11	P08547	SWISSPROT	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
12628	24707		3.57	2.0E-11	11417986	NT	Homo sapiens SEC14 (S. cerevisiae)-like 2 (SEC14L2), mRNA
704	13325	25812	2.83	1.0E-11	AJ131016.1	NT	Homo sapiens SQ gene locus
816	13434	25939	0.84	1.0E-11	AL163208.2	NT	Homo sapiens chromosome 21 segment HS21C009
1259	13658	26372	2.68	1.0E-11	AL163279.2	NT	Homo sapiens chromosome 21 segment HS21C079
1546	14138		1.66	1.0E-11	AF119914.1	NT	Homo sapiens PRO3078 mRNA, complete cds
2171	14748	27317	2.61	1.0E-11	AF000573.1	NT	Homo sapiens homogenisate 1,2-dioxygenase gene, complete cds
3546	16150	28630	0.83	1.0E-11	BE004315.1	EST_HUMAN	CMO-BN0105-170300-292-d12 BN0105 Homo sapiens cDNA
4805	17480		0.97	1.0E-11	AL183285.2	NT	Homo sapiens chromosome 21 segment HS21C085
5535	18167	30581	15.03	1.0E-11	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047
5997	18817	31353	0.8	1.0E-11	BF222646.1	EST_HUMAN	7p57d01.x1 NCI_CGAP_P128 Homo sapiens cDNA clone IMAGE:3849945 3' similar to contains MER10.b3
8143	20884	33598	3.16	1.0E-11	4885546	NT	MER10 repetitive element;
8517	21058	33979	4.69	1.0E-11	R13174.1	EST_HUMAN	Homo sapiens PHD finger protein 2 (PHF2) mRNA
8978	21518	34440	1.38	1.0E-11	BF365119.1	EST_HUMAN	y73d08.r1 Soares infant brain IN18 Homo sapiens cDNA clone IMAGE:28166 5'
8978	21518	34441	1.38	1.0E-11	BF365119.1	EST_HUMAN	QV4-NN1149-250900-423-a03 NN1149 Homo sapiens cDNA
11167	23674	36721	2.46	1.0E-11	BF680078.1	EST_HUMAN	QV4-NN1149-250900-423-a03 NN1149 Homo sapiens cDNA
2978	15585	28075	0.67	9.0E-12	P20742	SWISSPROT	902154807F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4285977 5'
9713	22211	35184	5.63	9.0E-12	AL163300.2	NT	PREGNANCY ZONE PROTEIN PRECURSOR
9713	22211	35185	5.63	9.0E-12	AL163300.2	NT	Homo sapiens chromosome 21 segment HS21C100
9261	21787		1	8.0E-12	BE074720.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C100
11911	24249		4.51	8.0E-12	AJ271736.1	NT	IL5-B10578-130300-036-G12 BT0578 Homo sapiens cDNA
4766	17347	29786	1.68	7.0E-12	Q05904	SWISSPROT	Homo sapiens Xq pseudautosomal region; segment 2/2
							34 KD SPICULE MATRIX PROTEIN PRECURSOR (LSM34)

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11228	23759	36815	12.18	7.0E-12	AA704735.1	EST_HUMAN	z429g01.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:451152 3'
3601	16205		0.72	6.0E-12	AV730554.1	EST_HUMAN	AV730554 HTF Homo sapiens cDNA clone HTFAWF06 5'
4440	17026	29466	10.25	6.0E-12	AA732516.1	EST_HUMAN	nz88f11.s1 NCL_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1302573 3' similar to contains Alu repetitive element;
8926	21464	34380	0.92	6.0E-12	AF003249.1	NT	Marone saxatilis myosin heavy chain FM3A (FM3A) mRNA, complete cds
9395	21818		1.8	6.0E-12	AA847898.1	EST_HUMAN	cd10q11.s1 NCL_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1387588 similar to contains MER29.12 repetitive element;
1081	13696	26198	2.85	5.0E-12	T06573.1	EST_HUMAN	EST04462 Fetal brain, Stralagene (cat#936206) Homo sapiens cDNA clone HFB0V33
3437	16045	28528	1.19	5.0E-12	BE047779.1	EST_HUMAN	tz42805.y1 NCL_CGAP_Brn52 Homo sapiens cDNA clone IMAGE:2291217 5'
3790	16390	28855	6.69	5.0E-12	AJ271736.1	NT	Homo sapiens Xq pseudautosomal region; segment 2/2
6172	18784	31550	6.59	5.0E-12	AL163278.2	NT	Homo sapiens chromosome 21 segment HS21C078
6172	18784	31551	5.59	5.0E-12	AL163278.2	NT	Homo sapiens chromosome 21 segment HS21C078
6817	19214	32019	9.62	5.0E-12	AW974760.1	EST_HUMAN	EST368850 MAGe resequences, MAGN Homo sapiens cDNA
7089	19448	32264	1.12	5.0E-12	AL040739.1	EST_HUMAN	DKFZp434B1615.s1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434B1615 3'
7108	19448	32264	1.14	5.0E-12	AL040739.1	EST_HUMAN	DKFZp434B1615.s1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434B1615 3'
8171	20712	33629	1.43	5.0E-12	AA033745.1	EST_HUMAN	z401g12.s1 Soares_fetal_heart_NbHH19W Homo sapiens cDNA clone IMAGE:375718 3' similar to contains L1.13 L1 repetitive element;
8602	21141		0.7	5.0E-12	AW887037.1	EST_HUMAN	RC1-OT0086-220300-011-607 OT0086 Homo sapiens cDNA
8925	21453		0.56	5.0E-12	AL079881.1	EST_HUMAN	DKFZp434J0428.t1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434J0428 5'
9037	21574	34504	2.42	5.0E-12	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
9344	21858	34806	1.04	5.0E-12	P34982	SWISSPROT	OLFACTORY RECEPTOR 1D2 (OLFACTORY RECEPTOR-LIKE PROTEIN HGMP07E) (OLFACTORY RECEPTOR 17-4) (OR17-4)
10176	22671		4.17	5.0E-12	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
10266	22761	35748	0.67	5.0E-12	AL163302.2	NT	Homo sapiens chromosome 21 segment HS21C102
10461	22955	35966	2.12	5.0E-12	6878754	NT	Rattus norvegicus Deleted in colorectal cancer (rat homolog) (Dcc), mRNA
265	12923	25409	3.53	4.0E-12	AA700328.1	EST_HUMAN	z74g11.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:460676 3'
266	12923	25409	4.43	4.0E-12	AA700326.1	EST_HUMAN	z74g11.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:460676 3'
4727	17308	29752	0.82	4.0E-12	AI685984.1	EST_HUMAN	b28h05.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:2270745 3' similar to TR:Q13539 Q13539 MARINER TRANSPOSASE.
7615	20128		0.7	4.0E-12	BF445140.1	EST_HUMAN	na21b03.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3366077 3' similar to contains MER7.b2 MER7 repetitive element;
8185	20726		2.2	4.0E-12	AF109907.1	NT	Homo sapiens S164 gene, partial cds; PS1 and hypothetical protein genes, complete cds; and S171 gene, partial cds
8621	21160	34075	1.2	4.0E-12	AB042815.1	NT	Bos taurus Mth2 mRNA for mitochondrial carrier homolog 2, complete cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10861	23476	36501	4.25	4.0E-12	AJ229043.1	NT	Homo sapiens 959 kb contig between AML1 and CBR1 on chromosome 21q22, segment 3/3
12180	24416		1.61	4.0E-12	U78027.1	NT	Homo sapiens Bruton's tyrosine kinase (BTK), alpha-D-galactosidase A (GLA), L44-like ribosomal protein (L44L) and FTP3 (FTP3) genes, complete cds
644	13267	25744	2.73	3.0E-12	AW341683.1	EST_HUMAN	h413d01.x1 Soares_NFL_T_GBC.S1 Homo sapiens cDNA clone IMAGE:2808377 3' similar to TR:O14517
644	13267	25745	2.73	3.0E-12	AW341683.1	EST_HUMAN	h413d01.x1 Soares_NFL_T_GBC.S1 Homo sapiens cDNA clone IMAGE:2808377 3' similar to TR:O14517
5843	18272	30746	1.18	3.0E-12	AF111168.2	NT	Homo sapiens serine palmitoyl transferase, subunit II gene, complete cds, and unknown genes
8316	20857	33783	0.52	3.0E-12	O35453	SWISSPROT	SERINE PROTEASE HEPSIN
8035	21572	34501	0.56	3.0E-12	O35453	SWISSPROT	SERINE PROTEASE HEPSIN
10535	23072	36085	3.26	3.0E-12	U37672.1	NT	Human prostate specific antigen gene, 5' flanking region
10535	23072	36086	3.26	3.0E-12	U37672.1	NT	Human prostate specific antigen gene, 5' flanking region
1893	14285	26820	1.05	2.0E-12	AW802131.1	EST_HUMAN	IL5-UM0071-120400-065-a05 UM0071 Homo sapiens cDNA
3513	16118	28598	0.67	2.0E-12	6754495	NT	Mus musculus keratin-associated protein 6.2 (Krtap6-2), mRNA
4192	16781	29228	0.9	2.0E-12	J01884.1	NT	Rat U3A small nuclear RNA
4192	16781	29230	0.9	2.0E-12	J01884.1	NT	Rat U3A small nuclear RNA
4512	17086		2.58	2.0E-12	BE063509.1	EST_HUMAN	CMO-BT0281-031169-087-a03 BT0281 Homo sapiens cDNA
6803	19200		1.54	2.0E-12	AW971857.1	EST_HUMAN	EST383946 MAGE resequences, MAGL Homo sapiens cDNA
7227	19758	32613	2.97	2.0E-12	T08169.1	EST_HUMAN	EST06060 Infant Brain, Berto Soares Homo sapiens cDNA clone H18BA13 5' end
7362	19808	32773	1.21	2.0E-12	BE173035.1	EST_HUMAN	MR0-HT0559-200400-015-e08 HT0559 Homo sapiens cDNA
7656	20168	33055	2.38	2.0E-12	11422228	NT	Homo sapiens Ac-like transposable element (ALTE), mRNA
7894	20436		0.6	2.0E-12	AV693827.1	EST_HUMAN	AV693827 GKC Homo sapiens cDNA clone GKCFZB04 5'
8232	21954		2.18	2.0E-12	AF196864.1	NT	Homo sapiens putative BPES syndrome breakpoint region protein gene, complete cds
9896	22383		11.42	2.0E-12	BE165980.1	EST_HUMAN	MR3-HT0487-150200-113-g01 HT0487 Homo sapiens cDNA
10408	22802	35888	0.69	2.0E-12	A1334130.1	EST_HUMAN	qq0702.x1 Soares_NHMPu.S1 Homo sapiens cDNA clone IMAGE:1931835 3' similar to TR:Q13538
11820	24180		2.46	2.0E-12	AL163283.2	NT	Homo sapiens chromosome 21 segment HS21C083
128	12798	25282	2.79	1.0E-12	AW627674.1	EST_HUMAN	h180a09.x1 NCL_CGAP_GU1 Homo sapiens cDNA clone IMAGE:2970040 3' similar to contains MER18.11
2031	14813		1.53	1.0E-12	A1871726.1	EST_HUMAN	MER18 repetitive element.
3106	15721	28191	1.33	1.0E-12	AF000991.1	NT	repetitive element.
3106	15721	28192	1.33	1.0E-12	AF000991.1	NT	Homo sapiens testis-specific Testis Transcript Y 2 (TTY2) mRNA, partial cds
3943	16541	29007	38.65	1.0E-12	AU132248.1	EST_HUMAN	Homo sapiens testis-specific Testis Transcript Y 2 (TTY2) mRNA, partial cds

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3943	16541	29008	38.66	1.0E-12	AU132248.1	EST_HUMAN	AU132248 NT2RP3 Homo sapiens cDNA clone NT2RP3004070 5'
6121	18736		1.85	1.0E-12	U82828.1	NT	Homo sapiens ataxia telangiectasia (ATM) gene, complete cds
6182	18802		1.95	1.0E-12	Q972G7	SWISSPROT	HYPOTHETICAL ZINC FINGER PROTEIN KIA00861
6653	19249	32051	0.7	1.0E-12	AF229843.1	NT	Mus musculus WNT-2 gene, partial cds; putative ankyrin-related protein and cystic fibrosis transmembrane conductance regulator (CFTR) genes, section 1 of 2 of the complete cds; and unknown gene
7170	19702	32549	1.74	1.0E-12	AF196864.1	NT	Homo sapiens putative BPES syndrome breakpoint region protein gene, complete cds
7204	19735	32587	9.7	1.0E-12	A1248533.1	EST_HUMAN	qh66a04.x1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:1849614 3' similar to gb:M19503 LINE-1 REVERSE TRANSCRIPTASE HOMOLOG (HUMAN); contains MER10.11 MER10 repetitive element;
7204	19735	32588	9.7	1.0E-12	A1248533.1	EST_HUMAN	qh66a04.x1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:1849614 3' similar to gb:M19503 LINE-1 REVERSE TRANSCRIPTASE HOMOLOG (HUMAN); contains MER10.11 MER10 repetitive element;
8428	20986	33880	0.54	1.0E-12	U66059.1	NT	Human germline T-cell receptor beta chain Dopamine-beta-hydroxylase-like, TRY1, TRY2, TRY3, TCRBV27S1P, TCRBV22S1A2N1T, TCRBV5S1A1T, TCRBV7S1A1N2T, TCRBV5S1A1T, TCRBV13S3, TCRBV6S7P, TCRBV7S3A2T, TCRBV13S2A1T, TCRBV9S2A2PT, TCRBV7S2A1N4T, TCRBV13S9/13S>
8639	21178	34098	1.18	1.0E-12	AA78323.1	EST_HUMAN	ac26d05.s1 Stratagene ovary (#837217) Homo sapiens cDNA clone IMAGE:857577 3'
11723	24130	37154	4.66	1.0E-12	AW962164.1	EST_HUMAN	EST T374237 MAGG resequences, MAGG Homo sapiens cDNA
11941	24273		1.6	1.0E-12	A1738592.1	EST_HUMAN	w133108.x1 NCI_CGAP_Cor16 Homo sapiens cDNA clone IMAGE:2392085 3'
12097	24990		2.72	1.0E-12	AL163268.2	NT	Homo sapiens chromosome 21 segment HS21C068
12424	24609		2.02	1.0E-12	AF224669.1	NT	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
4019	16617	29092	0.91	9.0E-13	AB028900.1	NT	Homo sapiens CST gene for cerebroside sulfotransferase, exon 1, 2, 3, 4, 5
9519	22019		3.1	9.0E-13	N69653.1	EST_HUMAN	za28b06.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:283651 3'
746	13366	25860	4.58	8.0E-13	U29185.1	NT	Homo sapiens prion protein (PrP) gene, complete cds
746	13366	25861	4.58	8.0E-13	U29185.1	NT	Homo sapiens prion protein (PrP) gene, complete cds
1878	14464	27021	3.95	8.0E-13	U80017.1	NT	Homo sapiens basic transcription factor 2 p44 (btf2p44) gene, partial cds, neuronal apoptosis inhibitory protein (naip) and survival motor neuron protein (smn) genes, complete cds
8056	20598	33505	0.68	8.0E-13	A1884398.1	EST_HUMAN	wm31109.x1 NCI_CGAP_U14 Homo sapiens cDNA clone IMAGE:2437601 3'
8056	20598	33506	0.68	8.0E-13	A1884398.1	EST_HUMAN	wm31109.x1 NCI_CGAP_U14 Homo sapiens cDNA clone IMAGE:2437601 3'
10051	22546		2.58	8.0E-13	U78027.1	NT	Homo sapiens Bruton's tyrosine kinase (BTK), alpha-D-galactosidase A (GLA), L44-like ribosomal protein (L44L) and F1TP3 (F1TP3) genes, complete cds

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11609	24052	37117	2.51	8.0E-13	J68080.1	NT	Human germline T-cell receptor beta chain TCRBV13S1, TCRBV6S8A2T, TCRBV5S8A3N2T, TCRBV13S6A2T, TCRBV6S8P, TCRBV5S3A2T, TCRBV13S8P, TCRBV6S3A1N1T, TCRBV5S2, TCRBV6S6A2T, TCRBV5S7P, TCRBV13S4, TCRBV6S2A1N1T, TCRBV5S4A2T, TCRBV6S4A1, TCRBV2S1A2T, TCRBV12>
8176	20717		0.63	7.0E-13	Q95155	SWISSPROT	OLFACTORY RECEPTOR-LIKE PROTEIN OLF2
12212	24435		37.61	7.0E-13	BE778223.1	EST_HUMAN	601463285F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3868613 5'
12448	24583		1.71	7.0E-13	Q10473	SWISSPROT	POLYPEPTIDE N-ACETYL GALACTOSAMINYLTRANSFERASE (PROTEIN-UDP
2149	14726	27299	6.02	6.0E-13	AL163207.2	NT	ACETYL GALACTOSAMINYLTRANSFERASE) (UDP-GALNAC:POLYPEPTIDE, N-
3364	15972		0.78	5.0E-13	R78338.1	EST_HUMAN	ACETYL GALACTOSAMINYLTRANSFERASE) (GALNAC-T1)
3444	18052		1.84	5.0E-13	AA435773.1	EST_HUMAN	Homo sapiens chromosome 21, segment HS21C007
6958	19535	32359	0.68	5.0E-13	P08983	SWISSPROT	y8204.r1 Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:145759 5'
10739	23264	36279	2.49	5.0E-13	P07313	SWISSPROT	z177a12.s1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:728350 3' similar to contains Alu repetitive element; contains element MER22 repetitive element;
1908	14493		3.69	4.0E-13	AW378614.1	EST_HUMAN	GAP JUNCTION BETA-1 PROTEIN (CONNEXIN 30) (CX30)
2500	15084		1.71	4.0E-13	AF003529.1	NT	MYOSIN LIGHT CHAIN KINASE, SKELETAL MUSCLE (MLCK)
4859	17436		1.03	4.0E-13	AA454054.1	EST_HUMAN	PM2-HT0224-221099-001-e11 HT0224 Homo sapiens cDNA
5774	18396	31113	5.09	4.0E-13	BE189131.1	EST_HUMAN	Homo sapiens glypican 3 (GPC3) gene, partial cds and flanking repeat regions
7257	19785	32641	1.07	4.0E-13	AB03750.1	NT	z48407.r1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:795469 5'
7607	20120	32897	0.81	4.0E-13	AA431529.1	EST_HUMAN	PM3-HT0520-230200-002-c08 HT0520 Homo sapiens cDNA
7705	20214		1.84	4.0E-13	N44291.1	EST_HUMAN	Homo sapiens mRNA for KIAA1329 protein, partial cds
8775	21314	34236	0.94	4.0E-13	AL043810.1	EST_HUMAN	zw76g12.r1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:782182 5' similar to TR:G452763
9933	22429	35403	4.28	4.0E-13	AI289831.1	EST_HUMAN	G452763 COR1 MRNA ;
11048	23559	36595	1.91	4.0E-13	AA435819.1	EST_HUMAN	y33g05.r1 Soares melanocyte 2NbHM Homo sapiens cDNA clone IMAGE:273080 5' similar to PIR:A32985
11046	23559	36596	1.91	4.0E-13	AA435819.1	EST_HUMAN	A32985 t complex sterility protein - mouse ;
192	12852		4.5	3.0E-13	AF003528.1	NT	DKFZp434A0128_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434A0128 5'
898	13512		4.87	3.0E-13	AA430310.1	EST_HUMAN	qn32d05.x1 NCI_CGAP_Kid5 Homo sapiens cDNA clone IMAGE:189945 3' similar to contains Alu repetitive element;
2408	14976	27550	1.06	3.0E-13	AI271736.1	NT	z178g10.s1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:728514 3'
2519	15083		6.72	3.0E-13	AL163210.2	NT	z178g10.s1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:728514 3'
							Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
							zw88g08.r1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:781406 5'
							Homo sapiens Xq pseudautosomal region; segment 2/2
							Homo sapiens chromosome 21 segment HS21C010

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2687	15245	27812	2.75	3.0E-13	BF372662.1	EST_HUMAN	CM3-FT0100-140700-242-H08 FT0100 Homo sapiens cDNA
3221	15833		3.1	3.0E-13	AA745944.1	EST_HUMAN	gb18402.st NCI CGAP_K165 Homo sapiens cDNA clone IMAGE:1324035.3
3551	16155	28637	1.04	3.0E-13	P18816	SWISSPROT	DNA-DIRECTED RNA POLYMERASE II LARGEST SUBUNIT (VERSION 1)
3551	16155	28638	1.04	3.0E-13	P18816	SWISSPROT	DNA-DIRECTED RNA POLYMERASE II LARGEST SUBUNIT (VERSION 1)
5730	18356	31060	0.7	3.0E-13	AA134017.1	EST_HUMAN	zn88h10.11 Stragene lung carcinoma 937218 Homo sapiens cDNA clone IMAGE:565315.5 similar to contains THR12 THR repetitive element;
5730	18356	31061	0.7	3.0E-13	AA134017.1	EST_HUMAN	zn88h10.11 Stragene lung carcinoma 937218 Homo sapiens cDNA clone IMAGE:565315.5 similar to contains THR12 THR repetitive element;
6143	18757	31515	0.68	3.0E-13	AW005639.1	EST_HUMAN	w286c02.x1 NCI CGAP_Bn25 Homo sapiens cDNA clone IMAGE:2565890.3 similar to TR:O75139 O75139 KIAA0644 PROTEIN;
7824	20366	33274	9.59	3.0E-13	U52111.2	NT	Homo sapiens X28 region near ALD locus containing dual specificity phosphatase 9 (DUSP9), ribosomal protein L18a (RPL18a), Ca2+/Calmodulin-dependent protein kinase I (CAMKI), creatine transporter (CRTR), CDM protein (CDM), adrenoleukodystrophy protein >
8021	20563	33464	0.66	3.0E-13	AA352487.1	EST_HUMAN	EST160487 Activated T-cells XX Homo sapiens cDNA 5' end similar to similar to serine protease P100, R-alpha reactive factor
8021	20563	33465	0.66	3.0E-13	AA352487.1	EST_HUMAN	EST160487 Activated T-cells XX Homo sapiens cDNA 5' end similar to similar to serine protease P100, R-alpha reactive factor
10556	23092		4.07	3.0E-13	AI064798.1	EST_HUMAN	HA0536 Human fetal liver cDNA library Homo sapiens cDNA
10924	23443	36484	2.91	3.0E-13	BE063509.1	EST_HUMAN	CM0-BT0281-031199-087-a03 BT0281 Homo sapiens cDNA
11469	23919	36988	2.49	3.0E-13	AL163248.2	NT	Homo sapiens chromosome 21 segment HS21C048
161	12824	25312	2.59	2.0E-13	U52111.2	NT	Homo sapiens X28 region near ALD locus containing dual specificity phosphatase 9 (DUSP9), ribosomal protein L18a (RPL18a), Ca2+/Calmodulin-dependent protein kinase I (CAMKI), creatine transporter (CRTR), CDM protein (CDM), adrenoleukodystrophy protein >
260	12919	25406	2.22	2.0E-13	U23839.1	NT	Danio rerio fibroblast growth factor receptor 4 mRNA, complete cds
1313	13907	26427	8.84	2.0E-13	AF239710.1	NT	Homo sapiens DNA polymerase delta small subunit (POLD2) gene, exons 1 through 11 and complete cds
3038	15654	28133	0.59	2.0E-13	8924119	NT	Homo sapiens hypothetical protein PRO2130 (PRO2130), mRNA
3038	15654	28134	0.58	2.0E-13	8924119	NT	Homo sapiens hypothetical protein PRO2130 (PRO2130), mRNA
3320	15930	28407	1.2	2.0E-13	BF431899.1	EST_HUMAN	heh7605.x1 Soares NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE: 3'
3555	16159	28642	1.14	2.0E-13	AF109907.1	NT	Homo sapiens S164 gene, partial cds; P51 and hypothetical protein genes, complete cds; and S171 gene, partial cds
4186	16776		1.9	2.0E-13	AL163278.2	NT	Homo sapiens chromosome 21 segment HS21C078
6271	18879	31647	5.27	2.0E-13	Q08852	SWISSPROT	GELL SURFACE GLYCOPROTEIN 1 PRECURSOR (OUTER LAYER PROTEIN B) (S-LAYER PROTEIN 1)

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6905	19639	32475	7.42	2.0E-13	X16912.1	NT	Human PFKL gene for liver-type 6-phosphofructokinase (EC 2.7.1.11) exon 2
10355	22849	35843	4.58	2.0E-13	5031898	NT	Homo sapiens mab-21 (C. elegans)-like 1 (MAB21L1) mRNA
11893	24238		20.31	2.0E-13	AW892155.1	EST_HUMAN	CNV0-NIN0001-100300-274-e11 NN0001 Homo sapiens cDNA
313	12997	25455	1.6	1.0E-13	S74129.1	NT	FGF-1=fibroblast growth factor 1 [human, kidney, Genomic, 342 nt, segment 2 of 2]
921	13534	26052	4.35	1.0E-13	AJ007873.1	NT	Homo sapiens LGMD2B gene
1381	13874	26502	1.01	1.0E-13	X87344.1	NT	H. sapiens DMA, DMB, HLA-Z1, IIP2, LIP2, TAP1, LMP7, TAP2, DOB, DOB2 and RING8, 9, 13 and 14 genes
2068	14648	27220	1.6	1.0E-13	AA720574.1	EST_HUMAN	nm21g02.s1 NCL_CGAP_GCB0 Homo sapiens cDNA clone IMAGE:1241138 3' similar to contains THR.13
4116	16710		2.21	1.0E-13	AA324394.1	EST_HUMAN	THR repetitive element ;
4696	17278	28724	1.51	1.0E-13	BF340987.1	EST_HUMAN	EST127235 Cerebellum II Homo sapiens cDNA 5' end similar to EST containing L1 repeat
7851	20393	33296	0.77	1.0E-13	AA577812.1	EST_HUMAN	S02038009F1 NCL_CGAP_Brn84 Homo sapiens cDNA clone IMAGE:4185866 5'
7851	20393	33297	0.77	1.0E-13	AA577812.1	EST_HUMAN	nm24d01.s1 NCL_CGAP_Gas1 Homo sapiens cDNA clone IMAGE:1084801 3' similar to contains Alu
10002	22497		0.9	1.0E-13	O15481	SWISSPROT	repetitive element; contains element MER24 repetitive element ;
10202	22697	35691	0.52	1.0E-13	AF300701.1	NT	repetitive element; contains element MER24 repetitive element ;
11256	23788	36842	15.07	1.0E-13	BF108755.1	EST_HUMAN	MELANOMA-ASSOCIATED ANTIGEN B4 (MAGE-B4 ANTIGEN)
11714	24124		1.87	1.0E-13	AV715377.1	EST_HUMAN	Mus musculus osteotesticular protein tyrosine phosphatase mRNA, complete cds
12393	24553		4.28	1.0E-13	AJ271735.1	NT	745e10.x1 Soares_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3524443 3' similar to contains MER29.b2 MER29 repetitive element ;
355	13004	25488	4.61	9.0E-14	AA781159.1	EST_HUMAN	AV715377 DCB Homo sapiens cDNA clone DOBAIE03 5'
358	13005	25489	2.07	9.0E-14	AA781159.1	EST_HUMAN	Homo sapiens Xq pseudautosomal region; segment 1/2
2545	15109		3.84	9.0E-14	AW861577.1	EST_HUMAN	aj24c01.s1 Soares_testis_NHT Homo sapiens cDNA clone 1391232 3' similar to contains MER19.11 MER19
2627	15189	27757	1.41	9.0E-14	AJ133127.1	NT	aj24c01.s1 Soares_testis_NHT Homo sapiens cDNA clone 1391232 3' similar to contains MER19.11 MER19
2627	15189	27758	1.41	9.0E-14	AJ133127.1	NT	repetitive element ;
2782	15335	27805	3.29	9.0E-14	AB038162.1	NT	RC4-CT0322-080100-013-d09 CT0322 Homo sapiens cDNA
3145	15759	28225	4.32	9.0E-14	AW513268.1	EST_HUMAN	Homo sapiens mRNA for sodium-glucose cotransporter (SGLT2 gene)
3275	13004	25488	0.71	9.0E-14	AA781159.1	EST_HUMAN	Homo sapiens mRNA for sodium-glucose cotransporter (SGLT2 gene)
3866	18464	28928	7.24	9.0E-14	D14547.1	NT	Homo sapiens TFF gene cluster for trical factor, complete cds
4870	17446	29897	1.77	9.0E-14	AJ002153.1	NT	xs64h05.x1 NCL_CGAP_U11 Homo sapiens cDNA clone IMAGE:2707833 3'
							aj24c01.s1 Soares_testis_NHT Homo sapiens cDNA clone 1391232 3' similar to contains MER19.11 MER19
							repetitive element ;
							Human DNA, SINE repetitive element
							Sequins oedipus gene for seminal vesicle secreted protein semenogelin I

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3545	16149		0.97	8.0E-14	BE468263.1	EST_HUMAN	h271009.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3213424 3'
4029	16827		3.29	8.0E-14	R76269.1	EST_HUMAN	y72e03.r1 Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:144796 3'
9369	20308	33211	36.57	8.0E-14	X89211.1	NT	H sapiens DNA for endogenous retroviral like element
9479	21878	34825	4.61	8.0E-14	AA219316.1	EST_HUMAN	zq17c10.s1 Stratagene fetal retina 937202 Homo sapiens cDNA clone IMAGE:629970 3'
11310	23803		4.45	8.0E-14	BE062558.1	EST_HUMAN	QV2-BT0258-261099-014-e01 BT0258 Homo sapiens cDNA
12106	24368	30972	2.07	8.0E-14	AI688118.1	EST_HUMAN	wc82h08.x1 NCI_CGAP_Co3 Homo sapiens cDNA clone IMAGE:2326143 3'
1671	15447		2.78	7.0E-14	AW151673.1	EST_HUMAN	x87e10.x1 NCI_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2823146 3' similar to contains MER10.12
8851	21390		0.54	7.0E-14	AL163285.2	NT	MER10 repetitive element;
390	13036	25525	14.21	6.0E-14	AF020503.1	NT	Homo sapiens chromosome 21 segment HS21C085
9736	22234	35212	3.27	6.0E-14	AF020503.1	NT	Homo sapiens FRA3B common fragile region, diadenosine triphosphate hydrolase (FHIT) gene, exon 5
9736	22234	35213	3.27	6.0E-14	AF020503.1	NT	Homo sapiens FRA3B common fragile region, diadenosine triphosphate hydrolase (FHIT) gene, exon 5
646	13289	25747	5.26	5.0E-14	Q63120	SWISSPROT	Homo sapiens FRA3B common fragile region, diadenosine triphosphate hydrolase (FHIT) gene, exon 5
5209	17774	30197	1.53	5.0E-14	AW073791.1	EST_HUMAN	CANALICULAR MULTISPECIFIC ORGANIC ANION TRANSPORTER 1 (MULTIDRUG RESISTANCE-ASSOCIATED PROTEIN 2) (CANALICULAR MULTIDRUG RESISTANCE PROTEIN)
5724	18350	31053	4.91	5.0E-14	P08547	SWISSPROT	xb03b05.x1 NCI_CGAP_GU1 Homo sapiens cDNA clone IMAGE:2575185 3' similar to contains L1.12 L1
1162	15434		1.81	4.0E-14	P04928	SWISSPROT	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
1920	14505	27062	3.86	4.0E-14	AJ007973.1	NT	S-ANTIGEN PROTEIN PRECURSOR
3816	16416		0.84	4.0E-14	AA046502.1	EST_HUMAN	Homo sapiens LGMD2B gene
4379	16966	29412	0.9	4.0E-14	N46328.1	EST_HUMAN	z687e06.r1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:487858 5'
7899	20441		0.49	4.0E-14	X87344.1	NT	y73c12.s1 Soares_multiple_sclerosis_2NbHMSHP Homo sapiens cDNA clone IMAGE:279190 3' similar to contains L1.13 L1 repetitive element;
11633	24073	37135	1.91	4.0E-14	P08548	SWISSPROT	H sapiens DMA, DMB, HLA-Z1, IPP2, LMP2, TAP1, LMP7, TAP2, DOB, DOB2 and RING8, 9, 13 and 14 genes
12457	25107		4.37	4.0E-14	AI886224.1	EST_HUMAN	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
885	13597	26110	1.26	3.0E-14	X95466.1	NT	wrm08c03.x1 NCI_CGAP_U14 Homo sapiens cDNA clone IMAGE:2435332 3' similar to contains Alu repetitive element;
5059	17632	30075	0.74	3.0E-14	AW265354.1	EST_HUMAN	R.nonviegus mRNA for OPG2 protein
							xb45f12.x1 NCI_CGAP_HN11 Homo sapiens cDNA clone IMAGE:2743343 3' similar to contains Alu repetitive element; contains element MER9 repetitive element;

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6832	19422	32237	1.08	3.0E-14	A1420786.1	EST_HUMAN	ta91g12.x1 NCI_CGAP_P128 Homo sapiens cDNA clone IMAGE:2094070 3' similar to TR:O00519 Q00519
							FATTY ACID AMIDE HYDROLASE. ;
6832	19422	32238	1.08	3.0E-14	A1420786.1	EST_HUMAN	ta91g12.x1 NCI_CGAP_P128 Homo sapiens cDNA clone IMAGE:2094070 3' similar to TR:O00519 Q00519
8722	21261	34181	0.96	3.0E-14	N42165.1	EST_HUMAN	FATTY ACID AMIDE HYDROLASE. ;
10872	23383	36408	2.75	3.0E-14	BE888016.1	EST_HUMAN	y07b10.r1 Soares melanocyte 2N5HM Homo sapiens cDNA clone IMAGE:270523 5'
							601511530F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3913087 5'
11116	17632	30075	9.84	3.0E-14	AW265354.1	EST_HUMAN	x045f12.x1 NCI_CGAP_HN11 Homo sapiens cDNA clone IMAGE:2743343 3' similar to contains Alu
12369	24964		1.64	3.0E-14	AL163285.2	NT	repetitive element; contains element MER9 repetitive element ;
413	13048	25539	2.51	2.0E-14	AJ271736.1	NT	Homo sapiens chromosome 21 segment HS21C085
413	13048	25540	2.51	2.0E-14	AJ271736.1	NT	Homo sapiens Xq pseudautosomal region; segment 2/2
719	15422	25828	9.8	2.0E-14	AL163303.2	NT	Homo sapiens Xq pseudautosomal region; segment 2/2
2431	14998		1.48	2.0E-14	AW372668.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C103
2504	15068		1.07	2.0E-14	7657528	NT	RC5-BT0377-091288-031-D12 BT0377 Homo sapiens cDNA
2567	15131	27699	1.03	2.0E-14	AL163209.2	NT	Homo sapiens rhabdoid tumor deletion region protein 1 (RTDR1), mRNA
2699	15256		0.88	2.0E-14	P08548	SWISSPROT	Homo sapiens chromosome 21 segment HS21C009
5715	18341	30847	0.95	2.0E-14	BF380661.1	EST_HUMAN	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
							IL2-UT0072-240800-142-D07 UT0072 Homo sapiens cDNA
5804	18429	31148	0.8	2.0E-14	A1312351.1	EST_HUMAN	ta78h01.x2 NCI_CGAP_HSC2 Homo sapiens cDNA clone IMAGE:2050225 3' similar to contains L1.13 L1
5895	18517	31242	2.86	2.0E-14	U01317.1	NT	repetitive element ;
6863	19540		0.98	2.0E-14	BE000550.1	EST_HUMAN	Human beta globin region on chromosome 11
7329	18856	32719	1.12	2.0E-14	P56163	SWISSPROT	RC3-BN0072-240200-011-a08 BN0072 Homo sapiens cDNA
7518	20038	32908	20.34	2.0E-14	BE158761.1	EST_HUMAN	ZINC-FINGER PROTEIN NEURO-D4
7518	20038	32907	20.34	2.0E-14	BE158761.1	EST_HUMAN	IL2-HT0397-071289-024-D04 HT0397 Homo sapiens cDNA
							IL2-HT0397-071289-024-D04 HT0397 Homo sapiens cDNA
9831	22329	35311	0.54	2.0E-14	A1978795.1	EST_HUMAN	wf59g10.x1 NCI_CGAP_UT1 Homo sapiens cDNA clone IMAGE:2492034 3' similar to contains Alu repetitive
10859	23191	36206	4.65	2.0E-14	AW139800.1	EST_HUMAN	element;
12366	24668		3.3	2.0E-14	AF008191.1	NT	U1H-B11-adv-a-10-0-U1.s1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2718234 3'
12617	15068		1.99	2.0E-14	7657528	NT	Homo sapiens putative G6 protein (GR6) gene, complete cds
1105	13709	26218	1.89	1.0E-14	AL163246.2	NT	Homo sapiens rhabdoid tumor deletion region protein 1 (RTDR1), mRNA
1452	14044	26572	6.89	1.0E-14	AL163268.2	NT	Homo sapiens chromosome 21 segment HS21C046
1452	14044	26573	6.89	1.0E-14	AL163268.2	NT	Homo sapiens chromosome 21 segment HS21C068
							Homo sapiens chromosome 21 segment HS21C085
2044	14626	27195	7.63	1.0E-14	L44140.1	NT	Homo sapiens chromosome X region from filamin (FLN) gene to glucose-6-phosphate dehydrogenase (G6PD) gene, complete cds's

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2228	14803	27374	5.33	1.0E-14	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
2453	15020	27591	5.89	1.0E-14	AF001689.1	NT	Homo sapiens ribosomal protein L23A (RPL23A) gene, complete cds
2971	15587	28069	1.51	1.0E-14	P05227	SWISSPROT	HISTIDINE-RICH PROTEIN PRECURSOR (CLONE PFHRP-II)
3203	15815	28290	3.91	1.0E-14	BF335227.1	EST_HUMAN	RC2-CT0432-310700-013-a09_1 CT0432 Homo sapiens cDNA
3203	15815	28291	3.91	1.0E-14	BF335227.1	EST_HUMAN	RC2-CT0432-310700-013-a09_1 CT0432 Homo sapiens cDNA
3955	16553	28022	2.1	1.0E-14	AA892994.1	EST_HUMAN	aa89c12.s1 Stralagene schizp brain S11 Homo sapiens cDNA clone IMAGE:971350 3'
4572	17155	29599	1.71	1.0E-14	AW275852.1	EST_HUMAN	xq39h10.x1 NCI_CGAP Lu28 Homo sapiens cDNA clone IMAGE:2753059 3'
5977	18597	31332	2.03	1.0E-14	AF128145.1	NT	Bos taurus xenobiotic/medium-chain fatty acid:CoA ligase form XL-III mRNA, nuclear mRNA encoding mitochondrial protein, complete cds
6778	24770	32183	12	1.0E-14	11437150	NT	Homo sapiens prominin (mouse)-like 1 (PROML1), mRNA
6778	24770	32184	12	1.0E-14	11437150	NT	Homo sapiens prominin (mouse)-like 1 (PROML1), mRNA
1820	14213	28744	1.19	9.0E-15	7427522	NT	Homo sapiens protein tyrosine phosphatase, receptor type, T (PTPRT), mRNA
2217	14792		1.39	9.0E-15	AF196779.1	NT	Homo sapiens transcription factor IGHM enhancer 3, JM11 protein, JM5 protein, T54 protein, JM10 protein, A4 differentiation-dependent protein, triple LIM domain protein 6, and synapophysin genes, complete cds; and L-type calcium channel α
7507	20029	32892	3.77	9.0E-15	P21416	SWISSPROT	GAG POLYPROTEIN[CONTAINS: CORE PROTEINS P15, P12, P30, P10]
7959	20501	33410	1.36	9.0E-15	BE003559.1	EST_HUMAN	60187750F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3960156 5'
12560	24960		1.76	9.0E-15	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047
2837	13138		1.17	8.0E-15	BE281482.1	EST_HUMAN	601148632F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3184023 5'
7233	19763	32819	1.28	7.0E-15	BF035327.1	EST_HUMAN	601458531F1 NIH_MGC_96 Homo sapiens cDNA clone IMAGE:3862086 5'
10331	22825		2.53	7.0E-15	AW241958.1	EST_HUMAN	xn77d02.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2700483 3' similar to contains THR12 THR repetitive element;
11776	24164		1.76	7.0E-15	AA284465.1	EST_HUMAN	zs57d08.r1 NCI_CGAP GC81 Homo sapiens cDNA clone IMAGE:701583 5' similar to gbL21934 STEROL
1031	13841	26156	6.29	8.0E-15	AJ271736.1	NT	O-ACYLTRANSFERASE (HUMAN); contains L1, L1 L1 repetitive element;
6077	18694	31440	1.18	8.0E-15	X73482.1	NT	Homo sapiens Xq pseudautosomal region; segment 2/2
6077	18694	31441	1.18	8.0E-15	X73482.1	NT	O.aries mRNA for hair keratin cysteine-rich protein
11182	25128		1.86	8.0E-15	AW836843.1	EST_HUMAN	O.aries mRNA for hair keratin cysteine-rich protein
12848	24722		1.3	6.0E-15	BF432200.1	EST_HUMAN	QV1-LT0038-150200-070-c10 LT0038 Homo sapiens cDNA
435	13068	25563	5.19	5.0E-15	AL163208.2	NT	nab81c12.x1 Soares_NSF_F8_gw_OT_PA_S1 Homo sapiens cDNA clone IMAGE: 3'
							Homo sapiens chromosome 21 segment HS21C008
2789	15342	27912	2.35	5.0E-15	U91328.1	NT	Human hereditary haemochromatosis region, histone 2A-like protein gene, hereditary haemochromatosis (HLA-H) gene, RefSeq gene, and sodium phosphate transporter (NPT3) gene, complete cds
3515	16120		1.08	5.0E-15	AW296817.1	EST_HUMAN	UI-H-BWO-ajb-g-10-0-UJ.s1 NCI_CGAP_Sub6 Homo sapiens cDNA clone IMAGE:2731219 3'

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5299	17861		1.28	5.0E-15	P11369	SW/ISSPROT	RETROVIRUS-RELATED POL POLYPROTEIN [CONTAINS: REVERSE TRANSCRIPTASE ; ENDONUCLEASE]
10555	23081		2.72	5.0E-15	AV730056.1	EST_HUMAN	AV730056 HTF Homo sapiens cDNA clone HTFAVE08 5'
452	12881	25137	2.33	4.0E-15	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
6771	18364	32173	0.79	4.0E-15	AB007870.1	NT	Homo sapiens mRNA, chromosome 1 specific transcript KIAA0501
10940	20287	33184	2.54	4.0E-15	AJ130894.1	NT	Homo sapiens mRNA for transcription factor
10940	20287	33185	2.54	4.0E-15	AJ130894.1	NT	Homo sapiens mRNA for transcription factor
4297	16883		7.28	3.0E-15	N88452.1	EST_HUMAN	LY1142F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA clone LY1142 5' similar to ANF(CARDIODILATIN)
5060	17633		0.57	3.0E-15	P92485	SW/ISSPROT	NADH-UBIQUINONE OXIDOREDUCTASE CHAIN 5
5179	17748	30175	0.72	3.0E-15	AA078097.1	EST_HUMAN	7P01F03 Chromosome 7 Placental cDNA Library Homo sapiens cDNA clone 7P01F03
5179	17748	30176	0.72	3.0E-15	AA078097.1	EST_HUMAN	7P01F03 Chromosome 7 Placental cDNA Library Homo sapiens cDNA clone 7P01F03
6904	19638		1.41	3.0E-15	Q84625	SW/ISSPROT	GLUTATHIONE PEROXIDASE RY2D1 PRECURSOR (ODORANT-METABOLIZING PROTEIN RY2D1)
7323	19850	32711	3.48	3.0E-15	M27685.1	NT	Mus musculus ultra high sulfur keratin gene, complete cds
7323	19850	32712	3.48	3.0E-15	M27685.1	NT	Mus musculus ultra high sulfur keratin gene, complete cds
9839	22337		2.32	3.0E-15	AA807128.1	EST_HUMAN	cc36a07.s1 NCJ_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1351784 3' similar to contains MER19.11 MER19 repetitive element ;
10873	23205	36218	3.36	3.0E-15	AB028698.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
12114	24997		1.36	3.0E-15	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
271	12928	25415	4.1	2.0E-15	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
391	13037	25526	3.78	2.0E-15	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
391	13037	25527	3.78	2.0E-15	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
2410	14978	27552	1.44	2.0E-15	BE350127.1	EST_HUMAN	h09q01.x1 NCJ_CGAP_Kid13 Homo sapiens cDNA clone IMAGE:3148256 3' similar to contains MER28.b3 MER29 repetitive element ;
2410	14978	27553	1.44	2.0E-15	BE350127.1	EST_HUMAN	h09q01.x1 NCJ_CGAP_Kid13 Homo sapiens cDNA clone IMAGE:3148256 3' similar to contains MER28.b3 MER29 repetitive element ;
3559	16163	28645	0.73	2.0E-15	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
3559	16163	28646	0.73	2.0E-15	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4142	16734	29188	0.95	2.0E-15	AW238499.1	EST_HUMAN	xp26h01.x1 NCI_CGAP_HN10 Homo sapiens cDNA clone IMAGE:2741521 3' similar to contains L1.13 L1 repetitive element ;
4728	17310		2.72	2.0E-15	AI806335.1	EST_HUMAN	wf07706.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2349923 3' similar to TR:Q61043
5332	17893	30308	0.93	2.0E-15	P13993	SWISSPROT	Q61043 NINEIN ;
5332	17893	30307	0.93	2.0E-15	P13993	SWISSPROT	REPTITIVE PROLINE-RICH CELL WALL PROTEIN 2 PRECURSOR
6328	18935	31711	1.02	2.0E-15	BE562352.1	EST_HUMAN	REPTITIVE PROLINE-RICH CELL WALL PROTEIN 2 PRECURSOR
6329	18935	31712	1.02	2.0E-15	BE562352.1	EST_HUMAN	601344253F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3677268 5'
7168	19700		1.37	2.0E-15	AJ400877.1	NT	601344253F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3677268 5'
7315	19842	32703	2.51	2.0E-15	AA704195.1	EST_HUMAN	Homo sapiens ASCL3 gene, CEGP1 gene, C11orf14 gene, C11orf15 gene, C11orf16 gene and C11orf17 gene
7427	19951	32816	4.49	2.0E-15	W05064.1	EST_HUMAN	z177e03.s1 Soares_fetal_liver_spleen_INFLS_S1 Homo sapiens cDNA clone IMAGE:460924 3'
8837	21376	34300	2.62	2.0E-15	Q14547.1	NT	z177e03.s1 Soares_fetal_liver_spleen_INFLS_S1 Homo sapiens cDNA clone IMAGE:460924 3'
9002	21539	34468	0.87	2.0E-15	AA397758.1	EST_HUMAN	WP.F44F4.8 CE02227 TRANSPOSASE ;
9002	21539	34469	0.87	2.0E-15	AA397758.1	EST_HUMAN	Human DNA, SINE repetitive element
9325	21839	34790	1.13	2.0E-15	AW379465.1	EST_HUMAN	z177g08.r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:728414 5'
9325	21839	34791	1.13	2.0E-15	AW379465.1	EST_HUMAN	z177g08.r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:728414 5'
10718	23246		3.59	2.0E-15	AJ271735.1	NT	GM0-HT0244-201099-078-a12 HT0244 Homo sapiens cDNA
12487	16163	28645	2.97	2.0E-15	AF223391.1	NT	GM0-HT0244-201099-078-a12 HT0244 Homo sapiens cDNA
12487	16163	28646	2.97	2.0E-15	AF223391.1	NT	Homo sapiens Xq pseudautosomal region, segment 1/2
2803	15355		2.08	1.0E-15	AI869984.1	EST_HUMAN	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
3046	15662	28143	1.24	1.0E-15	BE043584.1	EST_HUMAN	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
3178	15789	28261	1.05	1.0E-15	P08647	SWISSPROT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
6510	19110	31896	1.71	1.0E-15	T95763.1	EST_HUMAN	tx28h05.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:2270745 3' similar to TR:Q13539 Q13539 MARINER TRANSPOSASE ;
7080	19652		1.91	1.0E-15	BE074217.1	EST_HUMAN	h140e02.y1 NCI_CGAP_O1g4 Homo sapiens cDNA clone IMAGE:2999162 5'
7105	19445	32262	0.77	1.0E-15	P39057	SWISSPROT	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
8174	20715	33631	0.89	1.0E-15	AL163280.2	NT	y640e10.s1 Soares_fetal_liver_spleen_INFLS Homo sapiens cDNA clone IMAGE:120234 3' similar to contains MER6 repetitive element ;
8359	20899	33819	4.97	1.0E-15	AI200976.1	EST_HUMAN	QV3-BT0569-270100-074-g05 BT0569 Homo sapiens cDNA
8359	20899	33820	4.97	1.0E-15	AI200976.1	EST_HUMAN	DYNEIN BETA CHAIN, CILIARY
							Homo sapiens chromosome 21 segment HS21C080
							qf68h06.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1755227 3'
							qf68h06.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1755227 3'

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8969	21507	34428	0.51	1.0E-15	AL163207.2	NT	Homo sapiens chromosome 21 segment HS21C007
8972	21510	34432	1.99	1.0E-15	4507208	NT	Homo sapiens spermidine synthase (SRM) mRNA
8171	21748	34891	0.87	1.0E-15	Q39575	SWISSPROT	DYNEIN GAMMA CHAIN, FLAGELLAR OUTER ARM
9550	22050	35012	1.18	1.0E-15	AA684853.1	EST_HUMAN	oh37c03.s1 NCL_CGAP_Kid6 Homo sapiens cDNA clone IMAGE:1459972 3' similar to contains L1 L3 L1
10898	23228	36242	6.86	1.0E-15	AF044083.1	NT	repetitive element; Homo sapiens major histocompatibility locus class III region
12564	24820	30792	9.35	1.0E-15	A1753944.1	EST_HUMAN	tr31c05.x1 NCL_CGAP_Ov23 Homo sapiens cDNA clone IMAGE:2219912 3' similar to contains Alu repetitive element
4417	17002	29632	0.63	9.0E-16	BF669487.1	EST_HUMAN	602120192F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4277422 5'
4802	17185	29632	1.11	9.0E-16	4503188	NT	Homo sapiens cut (Drosophila)-like 1 (CCAT displacement protein) (CUTL1) mRNA
10873	23394	36409	2.68	9.0E-16	F08688.1	EST_HUMAN	HSC23F081 normalized infant brain cDNA Homo sapiens cDNA clone c-23f05
5880	18502	31228	0.73	7.0E-16	4885120	NT	Homo sapiens chemokine (C-C motif) receptor 8 (CCR8) mRNA
7379	19805	32769	1.36	7.0E-16	O88807	SWISSPROT	PROTEIN-ARGININE DEIMINASE TYPE IV (PEPTIDYLARGININE DEIMINASE IV) (PAD-R4)
7379	19805	32770	1.36	7.0E-16	O88807	SWISSPROT	(PEPTIDYLARGININE DEIMINASE TYPE ALPHA)
12509	24918		33.75	7.0E-16	T94149.1	EST_HUMAN	PROTEIN-ARGININE DEIMINASE TYPE IV (PEPTIDYLARGININE DEIMINASE IV) (PAD-R4)
2186	14782		29.26	6.0E-16	AW972811.1	EST_HUMAN	ye28c12.r1 Stralagene lung (#937210) Homo sapiens cDNA clone IMAGE:118082 5'
5436	17991	30397	0.94	6.0E-16	BF365702.1	EST_HUMAN	EST384702 IMAGE resequences, MAGL Homo sapiens cDNA
1539	14131	26667	1.21	5.0E-16	AJ251154.1	NT	QV2-NT0048-160800-318-d12 NT0048 Homo sapiens cDNA
2705	15262	27829	2.6	5.0E-16	AA892176.1	EST_HUMAN	Mus musculus olfactory receptor cluster, OR37A, OR37B, OR37C, OR37E genes and OR37D pseudogene
11398	23848	36814	3.76	5.0E-16	BF217388.1	EST_HUMAN	o88c04.s1 Scores_total_fetus_Nb2HF8_3w Homo sapiens cDNA clone IMAGE:1623078 3' similar to contains element L1 repetitive element
12908	24890		4.96	5.0E-16	11418127	NT	601885734F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:4104129 5'
2281	14855		1.23	4.0E-16	AB001523.1	NT	Homo sapiens GTP binding protein 1 (GTPBP1), mRNA
2419	14987	27561	1.68	4.0E-16	AW797168.1	EST_HUMAN	Homo sapiens gene for TMEM1 and PW/P2, complete and partial cds
2419	14987	27562	1.68	4.0E-16	AW797168.1	EST_HUMAN	QV1-JM0038-200300-115-g02 UM0038 Homo sapiens cDNA
3503	16108	28584	6.73	4.0E-16	Q16653	SWISSPROT	QV1-JM0038-200300-115-g02 UM0038 Homo sapiens cDNA
4223	16811	29258	4.28	4.0E-16	BE083875.1	EST_HUMAN	MYELIN-OLIGODENDROCYTE GLYCOPROTEIN PRECURSOR
4223	16811	29259	4.28	4.0E-16	BE083875.1	EST_HUMAN	PM4-BT0650-010400-002-g09 BT0650 Homo sapiens cDNA
7698	20207	33094	37.48	4.0E-16	AL163284.2	NT	PM4-BT0650-010400-002-g09 BT0650 Homo sapiens cDNA
9219	21736	34678	1.44	4.0E-16	11423191	NT	Homo sapiens chromosome 21 segment HS21C084
11098	23508	36648	1.68	4.0E-16	AV730030.1	EST_HUMAN	Homo sapiens hypothetical protein FLJ10024 (FLJ10024), mRNA
							AV730030 HTF Homo sapiens cDNA clone HTF-AW03 5'

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11800	24180		1.34	4.0E-16	P08548	SWISSPROT	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
11887	24232		13.78	4.0E-16	C05947.1	EST_HUMAN	C05947 Human pancreatic islet Homo sapiens cDNA clone hbc5355
11897	24239	31006	2.91	4.0E-16		NT	Homo sapiens Grb2-associated binder 2 (KIAA0571). mRNA
12178	24414		1.8	4.0E-16	R18591.1	EST_HUMAN	yf86b11.r1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:30489 5'
138	12803	25292	0.93	3.0E-16	AW022862.1	EST_HUMAN	df45c01.y1 Morton Fetal Cochlea Homo sapiens cDNA clone IMAGE:2486376 5'
138	12803	25293	0.93	3.0E-16	AW022862.1	EST_HUMAN	df45c01.y1 Morton Fetal Cochlea Homo sapiens cDNA clone IMAGE:2486376 5'
481	13124		1.24	3.0E-16	AL048445.1	EST_HUMAN	DKFZp434P037_r1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434P037 5'
501	13133		2.35	3.0E-16	AF135446.1	NT	Homo sapiens TSX (TSX) pseudogene, exon 5
1501	14093	26632	1.81	3.0E-16	Q28983	SWISSPROT	ZONADHESIN PRECURSOR
3004	15820	28097	4.2	3.0E-16	P03200	SWISSPROT	ENVELOPE GLYCOPROTEIN GP340 (MEMBRANE ANTIGEN) (MA) [CONTAINS: GLYCOPROTEIN GP220]
4007	16605	29079	0.81	3.0E-16	T08169.1	EST_HUMAN	EST06060 Infant Brain, Bento Soares Homo sapiens cDNA clone HIBBA13 5' end
4031	16629		1.07	3.0E-16	U03887.1	NT	Human BXP20 gene
4689	17271	29720	0.97	3.0E-16	AW160828.1	EST_HUMAN	au76b06.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2782183 5' similar to SW:KID1_MOUSE Q61751 RENAL TRANSCRIPTION FACTOR KID-1
5077	17650	30091	1.14	3.0E-16	AV661393.1	EST_HUMAN	AV661393 GLC Homo sapiens cDNA clone GLCGSA01 3'
5492	18116		0.9	3.0E-16	AA077225.1	EST_HUMAN	7B10F02 Chromosome 7 Fetal Brain cDNA Library Homo sapiens cDNA clone 7B10F02
5801	18426	31144	1.57	3.0E-16	AF003529.1	NT	Homo sapiens glypican 3 (GPC3) gene, partial cds and flanking repeat regions
8592	21131	34047	4.08	3.0E-16	A1002836.1	EST_HUMAN	am98h05.s1 Stralagene schizo brain S11 Homo sapiens cDNA clone IMAGE:1684185 3' similar to contains THR.b2 THR repetitive element
9805	22303		0.84	3.0E-16	BF690617.1	EST_HUMAN	602246538F1 NIH_MGC_62 Homo sapiens cDNA clone IMAGE:4332032 5'
10027	22622	35518	5.15	3.0E-16	L78810.1	NT	Homo sapiens ADP/ATP carrier protein (ANT-2) gene, complete cds
12637	25078	30516	9.33	3.0E-16	AL043268.2	EST_HUMAN	DKFZp434L1623_r1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434L1623 5'
1007	13618		1.38	2.0E-16	AL163279.2	NT	Homo sapiens chromosome 21 segment HS21C079
2429	14996		1.01	2.0E-16	AA821761.1	EST_HUMAN	af06d04.s1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1030855 3'
2713	15270		1.53	2.0E-16	J03081.1	NT	Human SSAV-related endogenous retroviral LTR-like element
4257	16843	29292	1.34	2.0E-16	X89211.1	NT	H sapiens DNA for endogenous retroviral like element
5370	17930	30344	0.57	2.0E-16	BE061178.1	EST_HUMAN	RC3-BT0046-131199-003-H12 BT0046 Homo sapiens cDNA
6839	19429	32245	0.89	2.0E-16	Q31125	SWISSPROT	HISTIDINE-RICH PROTEIN KE4
7701	20210	33097	0.76	2.0E-16	A1470723.1	EST_HUMAN	tf16a11.x1 NCL CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2141708 3' similar to contains element MER33 repetitive element
7908	20450	33357	1.81	2.0E-16	A1732837.1	EST_HUMAN	n24706.x5 NCL CGAP_P12 Homo sapiens cDNA clone IMAGE:1280947 similar to TR:O54849 O54849 HYPOTHETICAL 42.9 KD PROTEIN. [2] TR:O08905 ;contains MER7.11 MER7 repetitive element

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8089	20840	33551	0.7	2.0E-16	BE858026.1	EST_HUMAN	782h09.x1 NCI_CGAP_P128 Homo sapiens cDNA clone IMAGE:3303521 3'
8089	20840	33552	0.7	2.0E-16	BE858026.1	EST_HUMAN	782h09.x1 NCI_CGAP_P128 Homo sapiens cDNA clone IMAGE:3303521 3'
8464	21004	33921	0.8	2.0E-16	AW877214.1	EST_HUMAN	CM4-PT0034-180200-508-a01 PT0034 Homo sapiens cDNA
8464	21004	33922	0.6	2.0E-16	AW877214.1	EST_HUMAN	CM4-PT0034-180200-508-a01 PT0034 Homo sapiens cDNA
10808	23331	36343	2.71	2.0E-16	5902145	NT	Homo sapiens ubiquitin carrier protein E2-C (UBCH10), mRNA
197	12857	25339	2.56	1.0E-16	AF200719.1	NT	Homo sapiens pituitary tumor transforming gene protein (PTTG) gene, complete cds
405	13080		29.83	1.0E-16	AA628592.1	EST_HUMAN	af39g1.1.s1 Soares, total Tetus, Nb2HF8_9w Homo sapiens cDNA clone IMAGE:1034084 3' similar to contains OFR.12 OFR repetitive element ;
2014	14596	27159	1.78	1.0E-16	BF327942.1	EST_HUMAN	QV0-BN0148-070700-283-a10 BN0148 Homo sapiens cDNA
5896	18518	31243	0.85	1.0E-16	AF163864.1	NT	Homo sapiens SNCA isoform (SNCA) gene, complete cds, alternatively spliced
6565	19163		27.66	1.0E-16	U45983.1	NT	Homo sapiens CCR8 chemokine receptor (CMKBR8) gene, complete cds
6688	19284	32087	2.77	1.0E-16	Q02779	SWISSPROT	MITOGEN-ACTIVATED PROTEIN KINASE KINASE 10 (MIXED LINEAGE KINASE 2) (PROTEIN KINASE MST)
7556	19163		6.98	1.0E-16	U45983.1	NT	Homo sapiens CCR8 chemokine receptor (CMKBR8) gene, complete cds
9207	21724	34687	1.15	1.0E-16	AW875651.1	EST_HUMAN	QV2-PT0012-040400-124-a05 PT0012 Homo sapiens cDNA
3802	16402	28866	2.48	9.0E-17	AW900048.1	EST_HUMAN	GM1-NN1003-200300-153-a01 NN1003 Homo sapiens cDNA
6824	18414		1.94	9.0E-17	AI392984.1	EST_HUMAN	tg22c11.x1 NCI_CGAP_CLL1 Homo sapiens cDNA clone IMAGE:2108524 3' similar to contains MER28.12 MER28 repetitive element ;
8052	20594		4.65	9.0E-17	AW150257.1	EST_HUMAN	xg49g12.x1 NCI_CGAP_U11 Homo sapiens cDNA clone IMAGE:2630850 3' similar to contains OFR.12 OFR repetitive element ;
10124	22819		2.1	9.0E-17	AF200719.1	NT	Homo sapiens pituitary tumor transforming gene protein (PTTG) gene, complete cds
1056	13681		1.59	8.0E-17	AW880701.1	EST_HUMAN	QV0-O10032-080300-155-a01 O10032 Homo sapiens cDNA
3861	16559		0.7	8.0E-17	AL163280.2	NT	Homo sapiens chromosome 21 segment HS21C080
5771	24748	31111	3.55	8.0E-17	BE172081.1	EST_HUMAN	MRO-HT0556-060300-003-a04 HT0559 Homo sapiens cDNA
7319	19846		1.82	8.0E-17	AV730759.1	EST_HUMAN	AV730759 HTF Homo sapiens cDNA clone HTFAQB07 5'
1505	14087		3.4	7.0E-17	6753097	NT	Mus musculus apolipoprotein B editing complex 2 (ApoBec2), mRNA
5526	18158		2.97	7.0E-17	AF216650.1	NT	Homo sapiens putative MTAP (MTAP) mRNA, partial cds, alternatively spliced
6789	19380	32196	7.15	7.0E-17	AF229843.1	NT	Mus musculus WNT-2 gene, partial cds; putative ankyrin-related protein and cystic fibrosis transmembrane conductance regulator (CFTR) genes, section 1 of 2 of the complete cds; and unknown gene
217	12878	25385	7.43	6.0E-17	AW983880.1	EST_HUMAN	RC1-HN0003-220300-021-a04 HN0003 Homo sapiens cDNA
6455	19056	31841	1.63	6.0E-17	AW66272.1	EST_HUMAN	h181d04.x1 Soares, NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2978695 3' similar to contains L1.12 L1 repetitive element ;
10192	22687	35690	0.52	6.0E-17	P20138	SWISSPROT	MYELOID CELL SURFACE ANTIGEN CD33 PRECURSOR (GP67)

Table 4

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
446	12675	25131	2.78	5.0E-17	T64110.1	EST_HUMAN	yo05f08.t1 Stratagene lung (#837210) Homo sapiens cDNA clone IMAGE:78839 5'
7586	20101	32976	1.82	5.0E-17	T81043.1	EST_HUMAN	xd26b04.t1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:108327 5'
9284	21884	34829	1.12	4.0E-17	AW129165.1	EST_HUMAN	xt26b04.x1 NCI_CGAP_Kid8 Homo sapiens cDNA clone IMAGE:2818622 3' similar to contains Alu repetitive element; contains MER19.b1 MER19 repetitive element ;
11365	23817	36878	2.17	4.0E-17	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047
11816	24188		2.36	4.0E-17	AI073546.1	EST_HUMAN	ov45e04.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1640286 3' similar to TR:Q16530
1540	14132		1.03	3.0E-17	D14547.1	NT	Q16530 PMS3 MRNA ; contains MER10.12 MER10 repetitive element ;
2146	14723	27295	1.28	3.0E-17	AW119123.1	EST_HUMAN	Human DNA, SINE repetitive element
3227	15839		1.41	3.0E-17	P35410	SWISSPROT	xd89c09.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2604784 3'
3704	16305	28773	1.24	3.0E-17	BE326522.1	EST_HUMAN	MAS-RELATED G PROTEIN-COUPLED RECEPTOR MRG
3704	16305	28774	1.24	3.0E-17	BE326522.1	EST_HUMAN	hw05b04.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3181988 3'
5181	17747		1.02	3.0E-17	BF511266.1	EST_HUMAN	hw05b04.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3181999 3'
8212	20753	33667	1.09	3.0E-17	N68451.1	EST_HUMAN	UI-H-B14-adj-c-06-0-01.1 NCI_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3085043 3'
9618	22118	35081	4.54	3.0E-17	AB026898.1	NT	zat14b02.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:292491 3' similar to contains PTR5.13 PTR5 repetitive element ;
10282	22777	35767	0.65	3.0E-17	BF327012.1	EST_HUMAN	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
10282	22777	35768	0.65	3.0E-17	BF327012.1	EST_HUMAN	QV3-BN0047-270700-283-a12 BN0047 Homo sapiens cDNA
11775	24163		3.77	3.0E-17	11417966	NT	QV3-BN0047-270700-283-a12 BN0047 Homo sapiens cDNA
375	13024	25510	3.38	2.0E-17	AI270080.1	EST_HUMAN	Homo sapiens SEC14 (S. cerevisiae)-like 2 (SEC14L2), mRNA
376	13024	25510	2.88	2.0E-17	AI270080.1	EST_HUMAN	qt63a06.x1 NCI_CGAP_Eso2 Homo sapiens cDNA clone IMAGE:1955922 3' similar to contains Alu repetitive element
1025	13636		1.12	2.0E-17	AA722932.1	EST_HUMAN	qt63a06.x1 NCI_CGAP_Eso2 Homo sapiens cDNA clone IMAGE:1955922 3' similar to contains Alu repetitive element
2490	15055	27627	2.43	2.0E-17	Q28983	SWISSPROT	zg81d04.s1 Soares_fetal_heart_NbHH19W Homo sapiens cDNA clone IMAGE:399751 3'
2490	15055	27628	2.43	2.0E-17	Q28983	SWISSPROT	ZONADHESIN PRECURSOR
2956	15572	28049	8.06	2.0E-17	P12036	SWISSPROT	ZONADHESIN PRECURSOR
5569	18200	30648	1.57	2.0E-17	M27685.1	NT	NEUROFILAMENT TRIPLET H PROTEIN (200 KDA NEUROFILAMENT PROTEIN) (NEUROFILAMENT HEAVY POLYPEPTIDE) (NF-H)
5569	18200	30649	1.57	2.0E-17	M27685.1	NT	Mus musculus ultra high sulfur keratin gene, complete cds
6410	19013		1.8	2.0E-17	AF055086.1	NT	Mus musculus ultra high sulfur keratin gene, complete cds
6618	19213		1.58	2.0E-17	AL134881.1	EST_HUMAN	Homo sapiens MHC class 1 region
7773	20282	33179	0.85	2.0E-17	AB037839.1	NT	DKFZp7620610_r1 762 (synonym: hmel2) Homo sapiens cDNA clone DKFZp7620610 5'
							Homo sapiens mRNA for KIAA1418 protein, partial cds

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar ("Top") Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8028	20570	33474	1.64	2.0E-17	Q95156	SWISSPROT	OLFACTORY RECEPTOR-LIKE PROTEIN OLF3
8394	20834	33856	1.15	2.0E-17	AA300640.1	EST_HUMAN	EST13504 Testis tumor Homo sapiens cDNA 5' end similar to similar to glycogenin
9783	22281	35287	2.45	2.0E-17	BE298888.1	EST_HUMAN	600944600F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:2960615 5'
9818	22316	35287	3.36	2.0E-17	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047
9818	22316	35288	3.36	2.0E-17	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047
10180	22855	35650	7.23	2.0E-17	D13391.1	NT	Human CYP19 gene for aromatase cytochrome P-450, promoter region (containing two cis-acting transcriptional regulatory elements)
10281	22776	35765	0.58	2.0E-17	P98083	SWISSPROT	BONE MORPHOGENETIC PROTEIN 1 PRECURSOR (BMP-1)
10281	22776	35766	0.58	2.0E-17	P98083	SWISSPROT	BONE MORPHOGENETIC PROTEIN 1 PRECURSOR (BMP-1)
10308	22800	35791	0.63	2.0E-17	A1798902.1	EST_HUMAN	we94b04.x1 Soares_NFL_I_GBC_S1 Homo sapiens cDNA clone IMAGE:2348719 3'
10308	22800	35792	0.63	2.0E-17	A1798902.1	EST_HUMAN	we94b04.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2348719 3'
780	13399	25902	3.38	1.0E-17	P08183	SWISSPROT	MULTIDRUG RESISTANCE PROTEIN 1 (P-GLYCOPROTEIN 1)
1748	14338		1.2	1.0E-17	AJ271736.1	NT	Homo sapiens Xq pseudautosomal region, segment 2/2
1804	14394	26839	2.89	1.0E-17	AL163207.2	NT	Homo sapiens chromosome 21 segment HS21C007
2162	14739	27309	2.11	1.0E-17	P02481	SWISSPROT	COLLAGEN ALPHA 1(III) CHAIN PRECURSOR
2373	14943	27515	1.86	1.0E-17	U79410.1	NT	Homo sapiens thrombospondin 2 (THBS2) gene, promoter region and exons 1A and 1B
3625	16228		0.89	1.0E-17	AF224669.1	NT	(UBE2D3) genes, complete cds
4217	16905		8.46	1.0E-17	R09842.1	EST_HUMAN	yf30e07.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:128388 5'
6759	19352	32161	1.55	1.0E-17	A1185642.1	EST_HUMAN	qe65b05.x1 Soares_fetal_lung_NbHL19W Homo sapiens cDNA clone IMAGE:1743825 3'
6759	19352	32162	1.55	1.0E-17	A1185642.1	EST_HUMAN	qe65b05.x1 Soares_fetal_lung_NbHL19W Homo sapiens cDNA clone IMAGE:1743825 3'
7148	19879	32520	1.28	1.0E-17	Q18831	SWISSPROT	URIDINE PHOSPHORYLASE (UDRPASE)
8528	21067	33986	1.23	1.0E-17	BE062744.1	EST_HUMAN	QV6-BT0263-101289-072-d07 BT0263 Homo sapiens cDNA
9918	22415	35390	0.94	1.0E-17	AW996538.1	EST_HUMAN	QV3-BN0046-220300-128-c10 BN0046 Homo sapiens cDNA
11295	23747	36805	1.82	1.0E-17	Q28824	SWISSPROT	MYOSIN LIGHT CHAIN KINASE, SMOOTH MUSCLE (MLCK) [CONTAINS: TELOKIN]
2510	15074	27647	1.13	9.0E-18	AA174078.1	EST_HUMAN	zp18g12.s1 Stratagene fetal retina 937202 Homo sapiens cDNA clone IMAGE:809862 3'
9418	21927		3.03	9.0E-18	A1472167.1	EST_HUMAN	j86403.x1 Soares_NSF_F8_9W_OT_PA_S1 Homo sapiens cDNA clone IMAGE:2148389 3'
3854	18452	28915	1.56	8.0E-18	4758977	NT	Homo sapiens protein tyrosine phosphatase, non-receptor type substrate 1 (PTPNS1) mRNA
371	13020	25504	32.66	7.0E-18	AW316976.1	EST_HUMAN	xx10b04.x1 NCL CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2837071 3' similar to gb.L20868 60S
371	13020	25505	32.66	7.0E-18	AW316976.1	EST_HUMAN	xx10b04.x1 NCL CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2837071 3' similar to gb.L20868 60S
7469	19991	32854	0.96	7.0E-18	AW887542.1	EST_HUMAN	R33-OT0091-170300-071-d03 OT0091 Homo sapiens cDNA

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12306	13020	25504	5.28	7.0E-18	AW316978.1	EST_HUMAN	xt10504.x1 NCI_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2837071 3' similar to gb:L20868 60S
12306	13020	25505	5.28	7.0E-18	AW316978.1	EST_HUMAN	RIBOSOMAL PROTEIN L4 (HUMAN);
3334	15944	28419	1.36	6.0E-18	X71791.2	NT	xt10504.x1 NCI_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2837071 3' similar to gb:L20868 60S
4857	17435		3.95	6.0E-18	P52181	SWISSPROT	Rattus norvegicus partial GdnFr-1 gene for glia-derived nexin/protease nexin 1, enhancer region PROTEIN-GLUTAMINE GAMMA-GLUTAMYLTRANSFERASE (TISSUE TRANSGLUTAMINASE) (TGASE C) (TGC)
8192	20733		2.75	6.0E-18	11428155	NT	Homo sapiens similar to high-mobility group (nonhistone chromosomal) protein 4 (H. sapiens) (LOC63446), mRNA
8289	20830	33751	0.6	6.0E-18	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
11014	23528	36564	1.87	6.0E-18	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C048
11209	23713	36767	1.9	6.0E-18	X87344.1	NT	H. sapiens DNA, DMB, HLA-Z1, IPP2, LMP2, TAP1, LMP7, TAP2, DOB, DQB2 and RING8, 8, 13 and 14 genes
11591	24034		2.22	6.0E-18	11428985	NT	Homo sapiens similar to ribosomal protein L12 (H. sapiens) (LOC63091), mRNA
12041	24328	30995	2.24	6.0E-18	U87929.1	NT	Human acylate hydratase (ACO2) gene, exon 4
1187	13788	26299	11.3	5.0E-18	AI280214.1	EST_HUMAN	qm85g11.x1 Soares_placenta_8w9weeks_2NbHP8to9W Homo sapiens cDNA clone IMAGE:183668 3' similar to contains Alu repetitive element
5284	17846	30273	0.94	5.0E-18	D81517.1	EST_HUMAN	HUM411F05B Clontech human fetal brain polyA+ mRNA (#6535) Homo sapiens cDNA clone GEN-411F05 5'
5477	18111	30520	1.03	5.0E-18	AF087913.1	NT	Human endogenous retrovirus HERV-P-T47D
8654	21193	34111	4.62	5.0E-18	BE143312.1	EST_HUMAN	MRO-HT0181-221099-002-c08 HT0161 Homo sapiens cDNA
10857	23378	36398	3.68	5.0E-18	10242378	NT	Homo sapiens lymphocyte activation-associated protein (LOC51088), mRNA
10857	23378	36397	3.68	5.0E-18	10242378	NT	Homo sapiens lymphocyte activation-associated protein (LOC51088), mRNA
12170	24409		6.5	5.0E-18	AW867182.1	EST_HUMAN	MR1-SN0035-060400-001-g11 SN0035 Homo sapiens cDNA
12531	24644		51.19	5.0E-18	AV650547.1	EST_HUMAN	AV650547 GLC Homo sapiens cDNA clone GLCCGA02 3'
130	12797	25283	1.98	4.0E-18	BE044078.1	EST_HUMAN	h36h04.x1 NCI_CGAP_UH1 Homo sapiens cDNA clone IMAGE:3039511 3' similar to contains MER29 b3
130	12797	25284	1.98	4.0E-18	BE044078.1	EST_HUMAN	h36h04.x1 NCI_CGAP_UH1 Homo sapiens cDNA clone IMAGE:3039511 3' similar to contains MER29 b3
1754	14344	28690	8.14	4.0E-18	AA621814.1	EST_HUMAN	h36h04.x1 NCI_CGAP_UH1 Homo sapiens cDNA clone IMAGE:1144845 3' similar to contains MER29 b3
1933	14517		0.92	4.0E-18	AI738592.1	EST_HUMAN	h36h04.x1 NCI_CGAP_UH1 Homo sapiens cDNA clone IMAGE:1144845 3' similar to contains MER29 b3
2242	14817	27390	1.23	4.0E-18	Q06430	SWISSPROT	h36h04.x1 NCI_CGAP_UH1 Homo sapiens cDNA clone IMAGE:1144845 3' similar to contains MER29 b3 N-ACETYLACTOSAMINIDE BETA-1,6-N-ACETYLGLUCOSAMINYLTRANSFERASE (N-ACETYLGLUCOSAMINYLTRANSFERASE) (L-BRANCHING ENZYME) (IGNT)

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2242	14817	27391	1.23	4.0E-18	Q08430	SWISSPROT	N-ACETYLGLUCOSAMINIDE BETA-1,6-N-ACETYLGLUCOSAMINYL TRANSFERASE (N-ACETYLGLUCOSAMINYL TRANSFERASE) (H-BRANCHING ENZYME) (IGNT)
5566	18197	30843	2.32	4.0E-18	A017565.1	EST_HUMAN	ou23e06.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1627138 3'
5566	18197	30844	2.32	4.0E-18	A017565.1	EST_HUMAN	ou23e06.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1627138 3'
7787	20330		0.81	4.0E-18	AA746811.1	EST_HUMAN	nx84e08.s1 NCI_CGAP_A1V1 Homo sapiens cDNA clone IMAGE:1266998 similar to contains L1.12 L1 repetitive element;
10884	23405	36424	7.68	4.0E-18	AA371807.1	EST_HUMAN	EST83633 Pituitary gland, subtracted (prolactin/growth hormone) II Homo sapiens cDNA 5' end similar to EST containing O family repeat
882	13496	26015	18.02	3.0E-18	AA814196.1	EST_HUMAN	db23h11.s1 NCI_CGAP_Kid5 Homo sapiens cDNA clone IMAGE:1324581 3' similar to SW_RS5_HUMAN
965	13576	26091	2.25	3.0E-18	BE086634.1	EST_HUMAN	P46782 40S RIBOSOMAL PROTEIN S5.;
4022	16620	29093	1.25	3.0E-18	AL163247.2	NT	CMO-BT0690-210300-298-g07 BT0690 Homo sapiens cDNA
6917	19576	32405	6.98	3.0E-18	BE001671.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C047
12312	24504	AW022015.1	8.85	3.0E-18	AW022015.1	EST_HUMAN	PMO-BN0081-100300-001-608 BN0081 Homo sapiens cDNA
272	12929	25416	2.57	2.0E-18	AW836820.1	EST_HUMAN	df31h12.y1 Morten Feal Cochlea Homo sapiens cDNA clone IMAGE:2485126 5'
1192	13783		197.1	2.0E-18	BE256097.1	EST_HUMAN	QV1-LT0036-150200-070-607 LT0036 Homo sapiens cDNA
3157	15771	28238	1.15	2.0E-18	Q39575	SWISSPROT	601114352F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3355044 5'
5606	18235		3.98	2.0E-18	AA868610.1	EST_HUMAN	DYNEIN GAMMA CHAIN, FLAGELLAR OUTER ARM
5697	18323	30823	3.16	2.0E-18	D14547.1	NT	ak53a07.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1409652 3' similar to TR:O14577
5697	18323	30824	3.16	2.0E-18	D14547.1	NT	O14577 BAC CLONE RG114A06 FROM 7Q31, COMPLETE SEQUENCE.;
6038	18657		1.98	2.0E-18	BF347229.1	EST_HUMAN	Human DNA, SINE repetitive element
6313	18920	31695	1	2.0E-18	X60459.1	NT	Human DNA, SINE repetitive element
6313	18920	31698	1	2.0E-18	X60459.1	NT	60202184F1 NCI_CGAP_Brn87 Homo sapiens cDNA clone IMAGE:4156670 5'
6424	19027	31810	0.84	2.0E-18	BF352940.1	EST_HUMAN	Human IFNAR gene for interferon alpha/beta receptor
6460	19061	31847	7.53	2.0E-18	AW665853.1	EST_HUMAN	Human IFNAR gene for interferon alpha/beta receptor
9960	22455	35437	1.39	2.0E-18	AW151673.1	EST_HUMAN	IL3-HT0619-220700-222-C12 HT0619 Homo sapiens cDNA
9960	22455	35438	1.39	2.0E-18	AW151673.1	EST_HUMAN	hi94g01.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2979984 3' similar to contains MER10.12
10854	23375	36394	4.96	2.0E-18	AW470791.1	EST_HUMAN	MER19.12 MER19 repetitive element;
							x67e10.x1 NCI_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2623146 3' similar to contains MER10.12
							MER10 repetitive element;
							x67e10.x1 NCI_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2623146 3' similar to contains MER10.12
							MER10 repetitive element;
							ha33d06.x1 NCI_CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2875499 3' similar to contains THR.b3
							THR repetitive element;

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11579	24025	37093	5.24	2.0E-18	AW151299.1	EST_HUMAN	hg47c09.x1 NCL_CGAP_U11 Homo sapiens cDNA clone IMAGE:2630728.3 similar to contains MER8.b2
11970	13793		20.18	2.0E-18	BE256097.1	EST_HUMAN	MER8 repetitive element ;
4507	17091		0.85	1.0E-18	T95406.1	EST_HUMAN	501114352F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3355044.5
5558	18190	30806	1.91	1.0E-18	AV653405.1	EST_HUMAN	ye43g05.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:120536.5 similar to contains L1 repetitive element ;
5759	18385	31099	2.18	1.0E-18	D00089.1	NT	AV653405 GLC Homo sapiens cDNA clone GLC0KE11.3
5759	18385	31100	2.18	1.0E-18	D00099.1	NT	Homo sapiens mRNA for Na,K-ATPase alpha-subunit, complete cds
6582	19180	31880	1.37	1.0E-18	AL163280.2	NT	Homo sapiens mRNA for Na,K-ATPase alpha-subunit, complete cds
8380	20920	33840	1.22	1.0E-18	AI148288.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C080
							contains L1.11 L1 repetitive element ;
9813	22311	35293	4.45	1.0E-18	U91328.1	NT	Human hereditary haemochromatosis region, histone 2A-like protein gene, hereditary haemochromatosis (HLA-H) gene, Rofet gene, and sodium phosphate transporter (NPT3) gene, complete cds
11918	24255	31011	4.39	1.0E-18	AF003529.1	NT	Homo sapiens glyican 3 (GPC3) gene, partial cds and flanking repeat regions
571	13202	25684	3.33	9.0E-19	AA281961.1	EST_HUMAN	z11d06.r1 NCL_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:712811.5 similar to contains MER19.12
572	13202	25684	2.66	9.0E-19	AA281961.1	EST_HUMAN	MER19 repetitive element ;
7760	20333		5.93	9.0E-19	F08688.1	EST_HUMAN	z11d06.r1 NCL_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:712811.5 similar to contains MER19.12
8622	21161	34076	2.46	9.0E-19	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
8622	21161	34077	2.46	9.0E-19	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
11007	23521	36556	3.92	9.0E-19	AB032969.1	NT	Homo sapiens mRNA for KIAA1143 protein, partial cds
11678	13202	25684	28.32	9.0E-19	AA281961.1	EST_HUMAN	z11d06.r1 NCL_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:712811.5 similar to contains MER19.12
1086	13691		1.38	8.0E-19	AW974802.1	EST_HUMAN	MER19 repetitive element ;
8090	20631	33544	1	8.0E-19	BE158936.1	EST_HUMAN	EST387007 MAGE sequences, MAGN Homo sapiens cDNA
2287	14861	27436	1.72	7.0E-19	4758139	NT	MRO-HT0404-210200-001-g06 HT0404 Homo sapiens cDNA
6584	19182	31982	1.91	7.0E-19	AF092080.1	NT	Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 6 (RNA helicase, 54kD) (DDX6) mRNA
7341	19868	32732	0.95	7.0E-19	P26444	SWISSPROT	Rattus norvegicus cp151 mRNA, partial cds
9925	22421	35395	0.47	7.0E-19	AI344951.1	EST_HUMAN	BETA CRYSTALLIN A2
11823	25088		2.85	7.0E-19	AA705684.1	EST_HUMAN	tb01c08.x1 NCL_CGAP_Lu28 Homo sapiens cDNA clone IMAGE:2052302.3
3847	16446		1.21	6.0E-19	AW852930.1	EST_HUMAN	z160b01.s1 Soares fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:435145.3
							PM0-CT0248-131099-001-g01 CT0248 Homo sapiens cDNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E- Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4582	17145	29582	1.39	6.0E-19	P34986	SWISSPROT	OLFACTORY RECEPTOR 6 (M60)
4582	17145	29593	1.39	6.0E-19	P34986	SWISSPROT	OLFACTORY RECEPTOR 6 (M60)
4819	17494		1.15	6.0E-19	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
6019	18638	31378	5.29	5.0E-19	Q00193	SWISSPROT	ZONA PELLUCIDA SPERM-BINDING PROTEIN B PRECURSOR (ZONA PELLUCIDA GLYCOPROTEIN ZP-X) (RC55)
6385	18969	31747	0.79	5.0E-19	AW663302.1	EST_HUMAN	h17b08.y1 NCL_CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988787 5'
10322	22816	35812	0.86	5.0E-19	AJ297699.1	NT	Homo sapiens partial IL-12RB1 gene for IL-12 receptor beta1 chain, exon 14
11412	23883	36924	7.61	5.0E-19	AW183725.1	EST_HUMAN	ix87b02.x1 Scores_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2984171 3' similar to contains element MSR1 repetitive element;
12544	24823		1.36	5.0E-19	U68060.1	NT	Human germline T-cell receptor beta chain TCRBV13S1, TCRBV6S8A2T, TCRBV5S6A3N2T, TCRBV13S8A2T, TCRBV6S9P, TCRBV5S3A2T, TCRBV13S8P, TCRBV6S3A1N1T, TCRBV5S2, TCRBV6S6A2T, TCRBV5S7P, TCRBV13S4, TCRBV6S2A1N1T, TCRBV5S4A2T, TCRBV6S4A1, TCRBV23S1A2T, TCRBV12-
580	13210	25688	0.95	4.0E-19	AB007970.1	NT	Homo sapiens mRNA, chromosome 1 specific transcript KIA0501
2707	15264	27831	1.25	4.0E-19	BF697362.1	EST_HUMAN	602130910F1 NIH_MGC 58 Homo sapiens cDNA clone IMAGE:4287674 5'
5593	18223	30672	1.1	4.0E-19	AF224869.1	NT	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
3919	16517	28982	1.58	3.0E-19	Q28997	SWISSPROT	BETA-2 ADRENERGIC RECEPTOR
3919	16517	28983	1.58	3.0E-19	Q28997	SWISSPROT	BETA-2 ADRENERGIC RECEPTOR
4373	16960	29405	0.9	3.0E-19	O43900	SWISSPROT	LIM-ONLY PROTEIN 6 (TRIPLE LIM DOMAIN PROTEIN 6)
4373	16960	29406	0.9	3.0E-19	O43900	SWISSPROT	LIM-ONLY PROTEIN 6 (TRIPLE LIM DOMAIN PROTEIN 6)
4544	17128	29571	1.33	3.0E-19	AV708136.1	EST_HUMAN	AV708136 ADC Homo sapiens cDNA clone ADCAMA11 5'
5484	18118		0.8	3.0E-19	AF223467.1	NT	Homo sapiens NPD008 protein (NPD008) mRNA, complete cds
7418	19942		1.83	3.0E-19	11432214	NT	Homo sapiens similar to aldo-keto reductase family 1, member B11 (aldose reductase-like) (H. sapiens) (LOC63222), mRNA
6380	20319	33220	1.2	3.0E-19	X89685.1	NT	M.musculus mRNA for TPCR33 protein
12084	24347		16.44	3.0E-19	AF165520.1	NT	Homo sapiens photobin I protein (PBI) mRNA, complete cds
2595	15157	27725	7.09	2.0E-19	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
4542	17126		1.26	2.0E-19	AJ311783.1	EST_HUMAN	q981602.x1 NCL_CGAP_Kid5 Homo sapiens cDNA clone IMAGE:1915898 3' similar to TR:Q89386 Q89386 POLJENV GENE ;
8272	20813	33735	8.35	2.0E-19	AA012854.1	EST_HUMAN	z934c09.r1 Scores retina N2b4HR Homo sapiens cDNA clone IMAGE:380880 5'
9823	22321	35306	0.81	2.0E-19	Q95155	SWISSPROT	OLFACTORY RECEPTOR-LIKE PROTEIN OLF2
507	13140		1.65	1.0E-19	BE408611.1	EST_HUMAN	601304125F1 NIH_MGC 21 Homo sapiens cDNA clone IMAGE:3638310 5'

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit: Accession No.	Top Hit Database Source	Top Hit Descriptor
2209	14785	27359	1.48	1.0E-19	H30795.1	EST_HUMAN	yv79g07.r1 Soares adult brain N2b4HB55Y Homo sapiens cDNA clone IMAGE:184188 5' similar to contains
2743	15298		2.16	1.0E-19	D38044.1	NT	MER10 repetitive element ;
2873	15491		5.99	1.0E-19	4758977	NT	Human gene for Ah-receptor, exon 7-9
3448	18055	28531	1.37	1.0E-19	AA834967.1	EST_HUMAN	Homo sapiens protein tyrosine phosphatase, non-receptor type substrate 1 (PTPNS1) mRNA
							aj49b12.s1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1393631 3' similar to contains MER37.12
							MER37 repetitive element ;
5322	17884		2.47	1.0E-19	AW117377.1	EST_HUMAN	xd88h10.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2604739 3' similar to contains
6225	18834	31607	3.54	1.0E-19	U12186.1	NT	L1.b2 L1 L1 repetitive element ;
							Oryctolagus cuniculus sodium/dicarboxylate cotransporter mRNA, partial cds
6368	25115		0.74	1.0E-19	AA595527.1	EST_HUMAN	nh22d03.s1 NCI_CGAP_P1 Homo sapiens cDNA clone IMAGE:953093 similar to contains L1.t1 L1
7624	20137	33015	0.86	1.0E-19	U08813.1	NT	Oryctolagus cuniculus Na ⁺ /glucose cotransporter-related protein mRNA, complete cds
7624	20137	33016	0.86	1.0E-19	U08813.1	NT	Oryctolagus cuniculus Na ⁺ /glucose cotransporter-related protein mRNA, complete cds
8387	20927	33847	1.79	1.0E-19	M64857.1	NT	Rabbit phosphorylase kinase beta subunit mRNA, complete cds
8678	21215		2.48	1.0E-19	T99920.1	EST_HUMAN	ye72b02.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:123243 5' similar to contains
10090	22585	35578	25.84	1.0E-19	AW812259.1	EST_HUMAN	ORF repetitive element ;
10099	22694	35587	1.89	1.0E-19	N44831.1	EST_HUMAN	RCO-ST0174-191099-031-b05 ST0174 Homo sapiens cDNA
11353	23807		2.24	1.0E-19	AW023137.1	EST_HUMAN	yv31e09.r1 Soares melanocyte 2NbHM Homo sapiens cDNA clone IMAGE:272872 5'
							df49h01.y1 Morton Fetal Cochlea Homo sapiens cDNA clone IMAGE:2487000 5'
11594	24037	37106	1.84	1.0E-19	U93163.1	NT	Homo sapiens IMAGE-B2 (IMAGE-B2), IMAGE-B3 (IMAGE-B3), IMAGE-B4 (IMAGE-B4), and IMAGE-B1
8754	19347	32155	2.39	8.0E-20	7657286	NT	(IMAGE-B1) genes, complete cds
8754	19347	32156	2.39	8.0E-20	7657286	NT	Mus musculus keratin-associated protein 9-1 (Krtap9-1), mRNA
7527	20047	32917	1.4	8.0E-20	A1221371.1	EST_HUMAN	Mus musculus keratin-associated protein 9-1 (Krtap9-1), mRNA
7527	20047	32918	1.4	8.0E-20	A1221371.1	EST_HUMAN	qp86f09.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1842089 3'
3314	15924	28402	0.78	7.0E-20	BF328455.1	EST_HUMAN	qp86f09.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1842089 3'
7088	19087	30443	5.61	7.0E-20	AL138120.1	EST_HUMAN	PM4-AN0098-050900-003-a04 AN0098 Homo sapiens cDNA
							DKFZp547D092.1 547 (synonym: hfbf1) Homo sapiens cDNA clone DKFZp547D092 5'
8433	20973	33887	9.45	7.0E-20	AA557657.1	EST_HUMAN	n46c04.s1 NCI_CGAP_P14 Homo sapiens cDNA clone IMAGE:1043718 similar to contains MER29.b2
							MER29 repetitive element ;
8433	20973	33886	9.45	7.0E-20	AA557657.1	EST_HUMAN	n46c04.s1 NCI_CGAP_P14 Homo sapiens cDNA clone IMAGE:1043718 similar to contains MER29.b2
11581	24008		9.21	7.0E-20	6912633	NT	MER29 repetitive element ;
3811	18214	28694	4.64	6.0E-20	P39188	SWISSPROT	Homo sapiens ribosomal protein L13a (RPL13A), mRNA
4369	16946	28386	4	6.0E-20	BE922434.1	EST_HUMAN	ALU SUBFAMILY J SEQUENCE CONTAMINATION WARNING ENTRY
							601441231F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3916231 5'

Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4700	17282		1.11	5.0E-20	AV725123.1	EST_HUMAN	AV725123 HTC Homo sapiens cDNA clone HTCBA01 5'
7169	19701	32548	1.33	5.0E-20	AF075301.1	EST_HUMAN	AF075301 Human fetal liver cDNA library Homo sapiens cDNA clone HA0250
7868	20428	33336	4.78	5.0E-20	W90525.1	EST_HUMAN	zh78d08.s1 Soares_fetal_liver_spleen_INFLS_S1 Homo sapiens cDNA clone IMAGE:418191 3' similar to contains MER30.11 MER30 repetitive element ;
7868	20428	33337	4.78	5.0E-20	W90525.1	EST_HUMAN	zh78d08.s1 Soares_fetal_liver_spleen_INFLS_S1 Homo sapiens cDNA clone IMAGE:418191 3' similar to contains MER30.11 MER30 repetitive element ;
8047	20589	33498	0.79	5.0E-20	BE165980.1	EST_HUMAN	MR3-HT0487-150200-113-g01 HT0487 Homo sapiens cDNA
8769	21308	34231	1.53	5.0E-20	AB028174.1	NT	Mus musculus MMAN-g mRNA, complete cds
8769	21308	34232	1.53	5.0E-20	AB028174.1	NT	Mus musculus MMAN-g mRNA, complete cds
9368	20305		1.08	5.0E-20	O60809	SWISSPROT	HYPOTHETICAL PROTEIN DJ845024.1
5830	18454		0.92	4.0E-20	Q99880	SWISSPROT	HISTONE H2B C (H2B/C)
7868	20408		5.58	4.0E-20	AB74352.1	EST_HUMAN	zb4g03.x1 NCI CGAP_Ov35 Homo sapiens cDNA clone IMAGE:2293398 3'
10393	22887	35882	1.38	4.0E-20	AW937488.1	EST_HUMAN	QV3-DT0043-090200-080-004 DT0043 Homo sapiens cDNA
2184	14760	27330	1.11	3.0E-20	U03888.1	NT	Human BXP21 gene
4288	18874	28323	1.49	3.0E-20	P23273	SWISSPROT	OLFACTORY RECEPTOR-LIKE PROTEIN I14
4408	16993	29438	0.67	3.0E-20	AF230376.1	NT	Meriones unguliculatus prestin (Pres) mRNA, complete cds
4731	17312	29755	0.93	3.0E-20	AA037616.1	EST_HUMAN	zk36b12.s1 Soares_pregnant_uterus_NbhPU Homo sapiens cDNA clone IMAGE:484895 3' similar to contains L1.13 L1 repetitive element ;
8865	21404		2.94	3.0E-20	D14547.1	NT	Human DNA, SINE repetitive element
10223	22718	35708	0.82	3.0E-20	BF185284.1	EST_HUMAN	601843561F1 NIH_MGC_54 Homo sapiens cDNA clone IMAGE:4084343 5'
10543	23080					SWISSPROT	RETROVIRUS-RELATED POLYPROTEIN [CONTAINS: REVERSE TRANSCRIPTASE ; ENDONUCLEASE]
11387	23839	36902	1.84	3.0E-20	P11389	SWISSPROT	qj70d02.x1 NCI CGAP_Kid3 Homo sapiens cDNA clone IMAGE:1864803 3' similar to contains Alu repetitive element
11387	23839	36903	2.42	3.0E-20	A1284244.1	EST_HUMAN	qj70d02.x1 NCI CGAP_Kid3 Homo sapiens cDNA clone IMAGE:1864803 3' similar to contains Alu repetitive element
11839	24202	31039	17.42	3.0E-20	BE988422.1	EST_HUMAN	601514180F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3915522 5'
863	13478		23.08	2.0E-20	AW303868.1	EST_HUMAN	3x24e10.x1 NCI CGAP_U14 Homo sapiens cDNA clone IMAGE:2761098 3' similar to SW:RS5_MOUSE
1150	13753	26282	2.92	2.0E-20	AA516335.1	EST_HUMAN	hg69h09.s1 NCI CGAP_Lip2 Homo sapiens cDNA clone IMAGE:940097 similar to TR:G1224068
1150	13753	26283	2.92	2.0E-20	AA516335.1	EST_HUMAN	G1224066 ORF2: FUNCTION UNKNOWN ;
1150	13753	26283	2.92	2.0E-20	AA516335.1	EST_HUMAN	hg69h09.s1 NCI CGAP_Lip2 Homo sapiens cDNA clone IMAGE:940097 similar to TR:G1224068
1150	13753	26283	2.92	2.0E-20	AA516335.1	EST_HUMAN	G1224066 ORF2: FUNCTION UNKNOWN ;

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2843	13478		16.26	2.0E-20	AW303868.1	EST_HUMAN	xr24e10.x1 NCI_CGAP_L14 Homo sapiens cDNA clone IMAGE:2761088 3' similar to SW:RS5_MOUSE
5081	17654	30094	4.35	2.0E-20	Q28983	SWISSPROT	P97461 40S RIBOSOMAL PROTEIN S6 ;
5081	17654	30095	4.35	2.0E-20	Q28983	SWISSPROT	ZONADHESIN PRECURSOR
5328	17889		1.43	2.0E-20	5174538	NT	ZONADHESIN PRECURSOR
8081	20803	33514	0.97	2.0E-20	AA309457.1	EST_HUMAN	Homo sapiens malate dehydrogenase 1, NAD (soluble) (MDH1) mRNA
9118	21654	34595	5.33	2.0E-20	D10083.1	NT	EST180326 Liver III Homo sapiens cDNA 5' end
9118	21654	34596	5.33	2.0E-20	D10083.1	NT	Homo sapiens RGH1 gene, retrovirus-like element
11622	24064	37128	1.76	2.0E-20	AA766755.1	EST_HUMAN	Homo sapiens RGH1 gene, retrovirus-like element
11622	24064	37129	1.76	2.0E-20	AA766755.1	EST_HUMAN	oe35b08.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1306935 3' similar to contains MER4.b2
12236	24809	30789	2.94	2.0E-20	H55371.1	EST_HUMAN	MER4 repetitive element ;
2056	15396	27211	3.02	1.0E-20	AA281961.1	EST_HUMAN	MER4 repetitive element ;
4533	17117	29563	1.18	1.0E-20	BF115158.1	EST_HUMAN	oe35b08.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1306935 3' similar to contains MER4.b2
5975	19551	32376	0.72	1.0E-20	AF049567.1	EST_HUMAN	MER4 repetitive element ;
9090	21626	34562	2.48	1.0E-20	AL118491	NT	CHR220310 Chromosome 22 exon Homo sapiens cDNA clone C22_391 5'
11427	23878	36943	3.02	1.0E-20	AF223391.1	NT	z11406.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:712811 5' similar to contains MER19.12
11966	24286		6.39	1.0E-20	AA420453.1	EST_HUMAN	MER19 repetitive element ;
11981	24098		3.9	9.0E-21	AW898189.1	EST_HUMAN	h184b08.x1 NCI_CGAP_P1 Homo sapiens cDNA clone IMAGE:745684 similar to contains L1.13 L1
8746	21285		1.77	8.0E-21	AW674891.1	EST_HUMAN	repetitive element ;
11413	23864	36925	4.8	8.0E-21	AA809411.1	EST_HUMAN	RC3-NN0068-090500-021-b03 NN0068 Homo sapiens cDNA
11852	24212		5.02	8.0E-21	O21330	SWISSPROT	bb30a02.y1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:2884714 5' similar to SW:NIAM_HUMAN
2113	14691	27258	1.61	7.0E-21	P15800	SWISSPROT	O95169 NADH-UBIQUINONE OXIDOREDUCTASE ASH1 SUBUNIT PRECURSOR ;
3784	16365	28832	0.59	7.0E-21	AL163300.2	NT	oe71f06.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1336635 3'
4341	16928		4.31	7.0E-21	AA048502.1	EST_HUMAN	ATP SYNTHASE A CHAIN (PROTEIN 6)
6564	19162	31960	0.79	7.0E-21	AL163218.2	NT	LAMININ BETA-2 CHAIN PRECURSOR (S-LAMININ) (LAMININ CHAIN B3)
							LAMININ BETA-2 CHAIN PRECURSOR (S-LAMININ) (LAMININ CHAIN B3)
							Homo sapiens chromosome 21 segment HS21C100
							z167a06.r1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:487858 5'
							Homo sapiens chromosome 21 segment HS21C018

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8327	20888	33791	1.47	7.0E-21	AJ277557.1	NT	Homo sapiens dNT-2 gene for mitochondrial 5(3')-deoxyribonucleotidase (dNT-2 gene), exons 1-5
8810	21148	34084	10.47	7.0E-21	D14718.1	NT	Human chromosomal protein HMGI1 related gene
10022	22517	35512	0.73	7.0E-21	AW856922.1	EST_HUMAN	RCO-CT0301-271199-031-F03 CT0301 Homo sapiens cDNA
10575	23110	36123	3.16	7.0E-21	AA723404.1	EST_HUMAN	zg73403.s1 Soares_fetal_heart_NbHH19W Homo sapiens cDNA clone IMAGE:388981 3' similar to gb:U14938 VITAMIN K-DEPENDENT PROTEIN S PRECURSOR (HUMAN);contains THR 13 OFR repetitive element ;
11147	23655	36697	1.94	7.0E-21	7706668	NT	Homo sapiens PTD013 protein (PTD013), mRNA
4179	16770	29219	0.89	6.0E-21	BE408611.1	EST_HUMAN	601304125F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3638310 5'
9063	21600		0.98	6.0E-21	BE162737.1	EST_HUMAN	PM1-HT0454-080100-002-H09 HT0454 Homo sapiens cDNA
980	13571	26087	0.82	5.0E-21	5802031	NT	Homo sapiens protein tyrosine phosphatase, non-receptor type 21 (PTPN21), mRNA
4453	17039	29482	3.12	5.0E-21	BE868839.1	EST_HUMAN	601849871F1 NIH_MGC_74 Homo sapiens cDNA clone IMAGE:3833880 5'
4922	17497	29948	5.67	5.0E-21	4885474	NT	Homo sapiens melanoma antigen, family C, 1 (MAGEC1), mRNA
6860	18594		0.83	5.0E-21	AW440864.1	EST_HUMAN	h605610.x1 NCI_CGAP_OML1 Homo sapiens cDNA clone IMAGE:2818154 3'
7086	19657	32496	1	5.0E-21	BE856505.1	EST_HUMAN	783d11.x1 NCI_CGAP_P128 Homo sapiens cDNA clone IMAGE:3303573 3' similar to contains OFR.11 OFR repetitive element ;
10466	22960	35970	0.79	5.0E-21	Q91690	SWISSPROT	ZINC FINGER PROTEIN GLI1 (GLI-1)
10466	22960	35971	0.79	5.0E-21	Q91690	SWISSPROT	ZINC FINGER PROTEIN GLI1 (GLI-1)
11766	24157		1.49	5.0E-21	AA393574.1	EST_HUMAN	z72c04.r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:727878 5'
1769	14359	26904	1.24	4.0E-21	AA970713.1	EST_HUMAN	cc86608.s1 NCI_CGAP_Kid5 Homo sapiens cDNA clone IMAGE:1573094 3' similar to TR:Q16530 Q16530 PMS3 MRNA ;contains OFR.11 OFR repetitive element ;
6853	19530	32355	3.04	4.0E-21	AB019576.1	NT	Rattus norvegicus mRNA for rTIM, complete cds
9695	22194	35167	0.61	4.0E-21	U91328.1	NT	Human hereditary haemochromatosis region, histone 2A-like protein gene, hereditary haemochromatosis (HLA-H) gene, RoRet gene, and sodium phosphate transporter (NPT3) gene, complete cds
1877	14463	27020	5.92	3.0E-21	AA218891.1	EST_HUMAN	zq15d06.s1 Stralagene fetal retina 937202 Homo sapiens cDNA clone IMAGE:628771 3'
2313	14855	27460	1.2	3.0E-21	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
3116	15730	28200	3.35	3.0E-21	AJ007673.1	NT	Homo sapiens LGMD2B gene
5691	18317	30816	0.97	3.0E-21	AJ277557.1	NT	Homo sapiens dNT-2 gene for mitochondrial 5(3')-deoxyribonucleotidase (dNT-2 gene), exons 1-5
5691	18317	30817	0.97	3.0E-21	AJ277557.1	NT	Homo sapiens dNT-2 gene for mitochondrial 5(3')-deoxyribonucleotidase (dNT-2 gene), exons 1-5
5913	18535		0.75	3.0E-21	AV681044.1	EST_HUMAN	AV681044 GLC Homo sapiens cDNA clone GLCGOAT0 3'
6326	18932		60.27	3.0E-21	BF184739.1	EST_HUMAN	60184465f.1 NIH_MGC_54 Homo sapiens cDNA clone IMAGE:4064945 5'

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Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7128	19469	32287	7.35	3.0E-21	BF361083.1	EST_HUMAN	RC1-OT0083-100800-019-g08 OT0083 Homo sapiens cDNA
9809	22109	35071	0.98	3.0E-21	AW897760.1	EST_HUMAN	CM1-NN0063-280400-203-H08 NN0063 Homo sapiens cDNA
12358	25013	30617	2.75	3.0E-21	AL183213.2	NT	Homo sapiens chromosome 21 segment HS21C013
157	12820		19.17	2.0E-21	BE163247.1	EST_HUMAN	QV3-HT0458-170200-090-g12 HT0458 Homo sapiens cDNA
970	13581	26093	0.71	2.0E-21	AB007857.2	NT	Homo sapiens mRNA for KIAA0397 protein, partial cds
970	13581	26094	0.71	2.0E-21	AB007857.2	NT	Homo sapiens mRNA for KIAA0397 protein, partial cds
1298	13853		2	2.0E-21	BE064410.1	EST_HUMAN	RC4-BT0311-141199-011-H08 BT0311 Homo sapiens cDNA
2665	15223	27795	2.45	2.0E-21	Q28983	SWISSPROT	ZONADHESIN PRECURSOR
2665	15223	27796	2.45	2.0E-21	Q28983	SWISSPROT	ZONADHESIN PRECURSOR
5875	18302	30784	1.81	2.0E-21	A1624582.1	EST_HUMAN	ts30103.x1 NCL_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2230109.3 similar to TR:Q99854 Q99854
5765	18391	31103	0.91	2.0E-21	AA027211.1	EST_HUMAN	HYPOTHETICAL 51.1 KD PROTEIN
5765	18391	31104	0.91	2.0E-21	AA027211.1	EST_HUMAN	z697a12.r1 Soares_fetal_heart_NbHH19W Homo sapiens cDNA clone IMAGE:366910.5
8304	20845	33768	5.08	2.0E-21	BE141765.1	EST_HUMAN	z697a12.r1 Soares_fetal_heart_NbHH19W Homo sapiens cDNA clone IMAGE:366910.5
8757	21296	34216	3.84	2.0E-21	AU136779.1	EST_HUMAN	QV0-HT0103-091199-050-g11 HT0103 Homo sapiens cDNA
10937	23454		2.2	2.0E-21	BE350127.1	EST_HUMAN	AU136779 PLACE1 Homo sapiens cDNA clone PLACE1005052.5
11199	23704	36754	2.24	2.0E-21	BE973829.1	EST_HUMAN	h109g01.x1 NCL_CGAP_Kid13 Homo sapiens cDNA clone IMAGE:3146256.3 similar to contains MER29.b3
11199	23704	36755	2.24	2.0E-21	BE973829.1	EST_HUMAN	MER29 repetitive element
12072	24351		10.78	2.0E-21	AF176815.1	NT	601680636F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:3951008.5
1298	13892	28415	1.54	1.0E-21	AA557657.1	EST_HUMAN	601680636F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:3951008.5
1448	14040		3.58	1.0E-21	A1601264.1	EST_HUMAN	Homo sapiens putative 8-hydroxyguanine DNA glycosylase gene, complete cds
5387	17955	30368	14.37	1.0E-21	P08548	SWISSPROT	ri46c04.s1 NCL_CGAP_P14 Homo sapiens cDNA clone IMAGE:1043718 similar to contains MER29.b2
6613	19210		2.59	1.0E-21	AL079752.1	EST_HUMAN	MER29 repetitive element
7243	19772	32629	4.56	1.0E-21	A1223104.1	EST_HUMAN	ar88d12.x1 Barstead cdon HPLRB7 Homo sapiens cDNA clone IMAGE:2152343.3
10477	22971		1.45	1.0E-21	5730038	NT	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
12485	24616		2.46	1.0E-21	AF046133.1	NT	DKFZp434i0830.t1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434i0830.5
4500	17084	29534	2.76	9.0E-22	A1702438.1	EST_HUMAN	qg47605.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1838336.3 similar to gb:M64241 QM
8540	21078	33988	1.2	9.0E-22	AL163201.2	NT	PROTEIN (HUMAN);
8540	21079	33989	1.2	9.0E-22	AL163201.2	NT	Homo sapiens SET domain and mariner transposase fusion gene (SETMAR) mRNA
10670	23202	36215	5.06	9.0E-22	AV761874.1	EST_HUMAN	Homo sapiens chromosome Xp22.410-8
							Homo sapiens chromosome Xp22.410-8
							NEUTRAL PROTEASE LARGE SUBUNIT
							Homo sapiens chromosome 21 segment HS21C001
							Homo sapiens chromosome 21 segment HS21C001
							AV761874 MDS Homo sapiens cDNA clone MDSGCCG05.5

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11553	24001	37073	3.44	9.0E-22	AU140358.1	EST_HUMAN	AU140358 PLACE2 Homo sapiens cDNA clone PLACE2000394 5'
984	13598		4.19	8.0E-22	BE144748.1	EST_HUMAN	CM0-HT0179-281099-078-005 HT0179 Homo sapiens cDNA
7837	20378		3.26	8.0E-22	AA046502.1	EST_HUMAN	ZK67a06.11 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:487858 5'
693	13316	25801	5.27	7.0E-22	AL163248.2	NT	Homo sapiens chromosome 21 segment HS21C048
4370	16657	29399	2.55	7.0E-22	O61838	SWISSPROT	ALPHA-2-MACROGLOBULIN PRECURSOR (ALPHA2M)
5190	17755	30184	1.12	7.0E-22	AB006881.1	NT	Homo sapiens gene for activin receptor type IIB, complete cds
8624	21163		1.99	7.0E-22	AF151054.1	NT	Homo sapiens HSPC220 mRNA, complete cds
8766	21305	34227	3.39	7.0E-22	M78590.1	EST_HUMAN	EST00738 Fetal brain, Stragene (cat#836206) Homo sapiens cDNA clone HFBCF07
9520	22020	34977	1.83	7.0E-22	AF006680.1	NT	Homo sapiens T cell receptor beta locus, TCRBV7S3A2 to TCRBV12S2 region
8184	20725		2.87	6.0E-22	AW028123.1	EST_HUMAN	wx05g07.x1 NCI_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2542812 3'
6840	19236	32038	2.82	5.0E-22	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
10221	22716	35707	7.63	5.0E-22	U60822.1	NT	Human dystrophin (DMD) gene, exons 7, 8 and 9, and partial cds
12314	24506		2.92	5.0E-22	BF476511.1	EST_HUMAN	naa27008.x1 NCI_CGAP_P128 Homo sapiens cDNA clone IMAGE:3255898 3' similar to contains Alu repetitive element;
3698	18299		0.83	4.0E-22	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region, segment 1/2
8049	20591	33498	0.53	4.0E-22	AV703223.1	EST_HUMAN	AV703223 ADB Homo sapiens cDNA clone ADBAUJE12 5'
8352	25122		3.36	4.0E-22	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
10601	23135	36149	2.85	4.0E-22	BF218030.1	EST_HUMAN	801882813F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:4095434 5'
12492	24621		3.39	4.0E-22	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
994	13606		0.99	3.0E-22	AI469879.1	EST_HUMAN	bm14h10.x1 NCI_CGAP_Co14 Homo sapiens cDNA clone IMAGE:2156611 3' similar to gbl:19593 HIGH AFFINITY INTERLEUKIN-9 RECEPTOR B (HUMAN); contains L1.11 L1 repetitive element ;
3735	16338		1.44	3.0E-22	D14718.1	NT	Human chromosomal protein HMG1 related gene
4921	17496	28947	3.04	3.0E-22	AI090125.1	EST_HUMAN	qb28c07.x1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:1697580 3' similar to contains MER12.12 MER12 repetitive element ;
8172	20713		1.07	3.0E-22	BE158613.1	EST_HUMAN	QV0-HT0368-080200-089-f12 HT0368 Homo sapiens cDNA
8177	20718	33633	2.55	3.0E-22	BE089841.1	EST_HUMAN	RC5-BT0707-150300-021-H10 BT0707 Homo sapiens cDNA
8301	20842	33762	1	3.0E-22	X60680.1	NT	R.rattus RY2G5 mRNA for a potential ligand-binding protein
8301	20842	33763	1	3.0E-22	X60680.1	NT	R.rattus RY2G5 mRNA for a potential ligand-binding protein
1896	14578		2.49	2.0E-22	N24942.1	EST_HUMAN	h273d05.s1 Soares_melanocyte 2NbHM Homo sapiens cDNA clone IMAGE:267369 3'
2584	15128	27697	1.61	2.0E-22	P24916	SWISSPROT	IMMEDIATE EARLY GENE 13 PROTEIN PRECURSOR
3467	16074	28547	5.3	2.0E-22	8394043	NT	Homo sapiens protein kinase, AMP-activated, gamma 3 non-catalytic subunit (PRKAG3), mRNA
4310	16896	29340	1.35	2.0E-22	AW817794.1	EST_HUMAN	PM1-ST0282-261199-001-d12 ST0282 Homo sapiens cDNA
6015	24753	31372	1.95	2.0E-22	W39456.1	EST_HUMAN	z020f01.1 Soares_senescent_fibroblasts_NbHSF Homo sapiens cDNA clone IMAGE:322873 5' similar to gb:X72308 MONOCYTE CHEMOTACTIC PROTEIN 3 PRECURSOR (HUMAN);

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6324	18930	31706	3.3	2.0E-22	BF092116.1	EST_HUMAN	RCO-TN0079-150800-025-t12 TN0079 Homo sapiens cDNA
9619	22119	35082	1.59	2.0E-22	A1276522.1	EST_HUMAN	q178h06.x1 Soares_NhHMPu_S1 Homo sapiens cDNA clone IMAGE:1878289 3' similar to contains MER29.G3 MER29 repetitive element ;
9712	22210	35182	0.69	2.0E-22	AA715315.1	EST_HUMAN	nv04h11.s1 NCI_CGAP_P122 Homo sapiens cDNA clone IMAGE:1219269 3'
9712	22210	35183	0.69	2.0E-22	AA715315.1	EST_HUMAN	nv04h11.s1 NCI_CGAP_P122 Homo sapiens cDNA clone IMAGE:1219269 3'
11595	24038	37107	2.33	2.0E-22	AW418960.1	EST_HUMAN	ha24f04.x1 NCI_CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2874855 3'
11644	24805	30886	2.57	2.0E-22	AL163280.2	NT	Homo sapiens chromosome 21 segment HS21C080
1921	14506	27063	1.59	1.0E-22	AW86517.1	EST_HUMAN	PMA-SN0020-010400-009-h02 SN0020 Homo sapiens cDNA
2620	15182	27748	1.88	1.0E-22	U50871.1	NT	Human familial Alzheimer's disease (STM2) gene, complete cds
3457	16064	28539	1.45	1.0E-22	D14547.1	NT	Human DNA, SINE repetitive element
7723	20231	33120	1.29	1.0E-22	BE084667.1	EST_HUMAN	MRO-BT0659-220200-002-h07 BT0659 Homo sapiens cDNA
10446	22940	35950	0.84	1.0E-22	A1365435.1	EST_HUMAN	qz09b07.x1 NCI_CGAP_CLL1 Homo sapiens cDNA clone IMAGE:2020981 3' similar to contains MER29.b2 MER29 repetitive element ;
10446	22940	35951	0.84	1.0E-22	A1365435.1	EST_HUMAN	qz09b07.x1 NCI_CGAP_CLL1 Homo sapiens cDNA clone IMAGE:2020981 3' similar to contains MER29.b2 MER29 repetitive element ;
12540	24650		12.67	9.0E-23	AW802801.1	EST_HUMAN	IL2-UM0076-070400-061-F11 UM0076 Homo sapiens cDNA
3629	16232	28707	0.64	8.0E-23	AF198349.1	NT	Gallus gallus Dach2 protein (Dach2) mRNA, complete cds
3352	15960		2.37	7.0E-23	AV647246.1	EST_HUMAN	AV647246 GLO Homo sapiens cDNA clone GLCAW007 3'
10918	23437	36458	4.4	7.0E-23	5031952	NT	Homo sapiens Nci56 (D. melanogaster)-like protein (NOT56L) mRNA
3481	16087		1.63	6.0E-23	AF199333.1	NT	Rattus norvegicus RIM1B (Rim1B) mRNA, complete cds
4355	16942	29384	1.1	6.0E-23	AL163249.2	NT	Homo sapiens chromosome 21 segment HS21C049
11780	24173	31026	3.44	6.0E-23	AF224669.1	NT	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
11780	24173	31027	3.44	6.0E-23	AF224669.1	NT	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
11990	24300	30985	4.29	6.0E-23	A1209130.1	EST_HUMAN	qg59c03.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1839460 3' similar to SW.MV10_MOUSE_P23249 PROTEIN MOV-10 ;
5635	18264	30736	5.78	5.0E-23	U82671.2	NT	Homo sapiens chromosome Xq28 melanoma antigen family A2a (MAGEA2A), melanoma antigen family A12 (MAGEA12), melanoma antigen family A2b (MAGEA2B), melanoma antigen family A3 (MAGEA3), celltractin (CALT), NAD(P)H dehydrogenase-like protein (NSDHL), and LI>
6386	24763	31770	3.68	5.0E-23	AF179818.1	NT	Pongo pygmaeus olfactory receptor (PPY116) gene, partial cds
7463	24763	31770	3.02	5.0E-23	AF179818.1	NT	Pongo pygmaeus olfactory receptor (PPY116) gene, partial cds
5375	17934	30348	0.92	3.0E-23	AW846839.1	EST_HUMAN	QV3-CT0194-031199-004-f08 CT0194 Homo sapiens cDNA
6568	19167	31963	1.01	3.0E-23	AL163227.2	NT	Homo sapiens chromosome 21 segment HS21C027

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6569	19167	31964	1.01	3.0E-23	AL163227.2	NT	Homo sapiens chromosome 21 segment HS21C027
7780	20323	33228	4.27	3.0E-23	AA130165.1	EST_HUMAN	z35g09.r1 Soares_pregnant_uterus_NHPU Homo sapiens cDNA clone IMAGE:503968 5' similar to contains MER29.12 MER29 repetitive element ;
9173	21750	34694	2.69	3.0E-23	Z70664.1	NT	Human endogenous retroviral element HC2
9173	21750	34695	2.69	3.0E-23	Z70664.1	NT	Human endogenous retroviral element HC2
10219	22714		1.23	3.0E-23	AW897927.1	EST_HUMAN	RC3-NN0066-270400-011-h01 NN0066 Homo sapiens cDNA
10989	23503		1.54	3.0E-23	AF280107.1	NT	Homo sapiens cytochrome P450 polypeptide 43 (CYP3A43) gene, partial cds; cytochrome P450 polypeptide 4 (CYP3A4) and cytochrome P450 polypeptide 7 (CYP3A7) genes, complete cds; and cytochrome P450 polypeptide 5 (CYP3A5) gene, partial cds
694	13317	25802	3.65	2.0E-23	AJ289890.1	NT	Homo sapiens KIAA0851 gene (partial), X13 gene and LZTFL1 gene
1182	15391		4.01	2.0E-23	M53270.1	NT	Human matrix Gla protein (MGP) gene, complete cds
2821	15373	27942	1.47	2.0E-23	P22105	SWISSPROT	TENASCIN-X PRECURSOR (TN-X) (HEXABRACHION-LIKE)
2821	15373	27943	1.47	2.0E-23	P22105	SWISSPROT	TENASCIN-X PRECURSOR (TN-X) (HEXABRACHION-LIKE)
3418	16028		1.36	2.0E-23	AJ201458.1	EST_HUMAN	qs73f11.x1 NCL CGAP_P128 Homo sapiens cDNA clone IMAGE:1943757 3' similar to TR-Q13537 Q13537
3778	16379		3.93	2.0E-23	BE165980.1	EST_HUMAN	MER37 TRANSPOSABLE ELEMENT, COMPLETE CONSENSUS SEQUENCE. ;
4048	16845	28112	3.01	2.0E-23	H59931.1	EST_HUMAN	MR3-HT0487-150200-113-g01 HT0487 Homo sapiens cDNA
4048	16845	28113	3.01	2.0E-23	H59931.1	EST_HUMAN	yt16a02.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:205418 5'
7814	20357		4.59	2.0E-23	AF280107.1	NT	Homo sapiens cytochrome P450 polypeptide 43 (CYP3A43) gene, partial cds; cytochrome P450 polypeptide 4 (CYP3A4) and cytochrome P450 polypeptide 7 (CYP3A7) genes, complete cds; and cytochrome P450 polypeptide 5 (CYP3A5) gene, partial cds
8777	21316	34238	1.05	2.0E-23	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
11772	24161		3.5	2.0E-23	M32658.1	NT	Human alcohol dehydrogenase gamma subunit (ADH3) gene, exon 1
12328	24512		4.44	2.0E-23	AF009680.1	NT	Homo sapiens T cell receptor beta locus, TCRCBV7S3A2 to TCRCBV12S2 region
12454	25017		1.35	2.0E-23	AU133931.1	EST_HUMAN	AU133931 OVARC1 Homo sapiens cDNA clone OVARC1000846 5'
4827	17210	29660	1.72	1.0E-23	AL163252.2	NT	Homo sapiens chromosome 21 segment HS21C052
4881	17458		5.35	1.0E-23	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
6821	19411		4.93	1.0E-23	BE378471.1	EST_HUMAN	601236455F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3808853 5'
8297	20838	33759	4.53	1.0E-23	AA448097.1	EST_HUMAN	z682c08.r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:762698 5' similar to contains PTR5.12 PTR5 repetitive element ;
578	13208		1.48	9.0E-24	AA663213.1	EST_HUMAN	ab75a08.s1 Stralagene fetal retina 937202 Homo sapiens cDNA clone IMAGE:852758 3' similar to TR:E19822 E19822 CA PROTEIN ;
4753	17334	28777	1.16	8.0E-24	P23269	SWISSPROT	OLFACTORY RECEPTOR-LIKE PROTEIN I3
4753	17334	28778	1.16	8.0E-24	P23269	SWISSPROT	OLFACTORY RECEPTOR-LIKE PROTEIN I3

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Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6576	18174	31973	1.06	8.0E-24	11422027	NT	Homo sapiens capping protein (actin filament) muscle Z-line, alpha 2 (CAPZA2), mRNA
3941	16539		1.23	7.0E-24	AW037954.1	EST_HUMAN	QV0-DT0047-170200-122-408 DT0047 Homo sapiens cDNA
5345	17806		18.11	7.0E-24	AL039498.1	EST_HUMAN	DKFZp434A2311.1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434A2311.5
10519	23057		2.8	7.0E-24	AW303317.1	EST_HUMAN	xv1703.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2813405 3' similar to contains Alu repetitive element; contains MER19.12 MER19 repetitive element;
735	13355		2.28	6.0E-24	AB001421.1	NT	Macaca fuscata mRNA for Testis-Specific Protein Y (TSPY), complete cds
871	13486	26001	12.95	6.0E-24	AL163249.2	NT	Homo sapiens chromosome 21 segment HS21C049
4042	16840	29107	9.12	5.0E-24	AJ229043.1	NT	Homo sapiens 959 kb contig between AML1 and CBR1 on chromosome 21q22, segment 3/3
7735	20243	33134	0.9	5.0E-24	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
6087	18703	31451	3.17	4.0E-24	AA594178.1	EST_HUMAN	nm31h05.s1 NCL_CGAP_Gas1 Homo sapiens cDNA clone IMAGE:1085529 3' similar to SW:POL_MLVRK P31795 POL POLYPROTEIN;
8615	21154	34068	1.37	4.0E-24	AW813711.1	EST_HUMAN	RC3-ST0197-130100-014-006 ST0197 Homo sapiens cDNA
11059	23571	36608	1.65	4.0E-24	BE544822.1	EST_HUMAN	601078812F1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3464498 5'
12165	24405	30980	4.77	4.0E-24	AB029016.1	NT	Homo sapiens mRNA for KIAA1083 protein, partial cds
12428	24611	30889	1.37	4.0E-24	11418318	NT	Homo sapiens G-2 and S-phase expressed 1 (GTSE1), mRNA
6362	20902		2.57	3.0E-24	AW614871.1	EST_HUMAN	hh68c08.x1 NCL_CGAP_GUT1 Homo sapiens cDNA clone IMAGE:2987850 3' similar to contains MER29.b2 MER29 repetitive element;
8414	20954		1.51	3.0E-24	AW962076.1	EST_HUMAN	EST374149 MAGE resequences, MAGG Homo sapiens cDNA
9386	21809	34760	3.79	3.0E-24	AL163252.2	NT	Homo sapiens chromosome 21 segment HS21C052
12247	24458	30959	2.85	3.0E-24	BF127762.1	EST_HUMAN	601810449F1 NIH_MGC_46 Homo sapiens cDNA clone IMAGE:4053396 5'
2384	14953	27525	3.07	2.0E-24	AA187539.1	EST_HUMAN	zp11f09.r1 Stragene fetal retina 937202 Homo sapiens cDNA clone IMAGE:609161 5'
3867	18465		0.82	2.0E-24	AW898189.1	EST_HUMAN	RC3-NN0068-090500-021-503 NN0068 Homo sapiens cDNA
7490	20013	32879	1.14	2.0E-24	AF096824.1	NT	Mus musculus rho/rae-interacting citron kinase (Crik) mRNA, complete cds
8675	21214	34135	2.59	2.0E-24	AL119156.1	EST_HUMAN	DKFZp761L1712.1 761 (synonym: hamy2) Homo sapiens cDNA clone DKFZp761L1712 5'
8712	21251		0.87	2.0E-24	H69214.1	EST_HUMAN	y92609.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:212729 5' similar to contains MER28 repetitive element;
9768	22266	35250	0.82	2.0E-24	AE521759.1	EST_HUMAN	t77a09.x1 NCL_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2138008 3'
9768	22266	35251	0.82	2.0E-24	AE521759.1	EST_HUMAN	t77a09.x1 NCL_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2138008 3'
12080	25062		13.88	2.0E-24	M28877.1	NT	Human O family dispersed repeat element
1734	14325	26867	3.18	1.0E-24	7706340	NT	Homo sapiens CGI-127 protein (LOC51646), mRNA
2697	15254		1.43	1.0E-24	AW820194.1	EST_HUMAN	QV0-ST0294-100400-189-c10 ST0294 Homo sapiens cDNA
3055	15671	28147	0.76	1.0E-24	D86423.1	NT	Mus musculus mRNA for HGT keratin, partial cds
4357	16944		1.97	1.0E-24	AF143313.1	NT	Homo sapiens PTEN (PTEN) gene, exon 2

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7551	20070	32946	4.06	1.0E-24	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
7713	20222	33109	0.8	1.0E-24	BE144526.1	EST_HUMAN	MRO-HT0166-271199-005-d09 HT0166 Homo sapiens cDNA
7885	20427	33335	1.38	1.0E-24	AW601164.1	EST_HUMAN	CMO-NN1010-130300-281-d07 NN1010 Homo sapiens cDNA
11545	23993	37084	1.58	9.0E-25	7706707	NT	Homo sapiens putative secreted protein (SIG11), mRNA
5443	17998		2.05	8.0E-25	6138972	NT	Homo sapiens adrenergic, beta, receptor kinase 2 (ADRBK2), mRNA
5136	17708	30140	2.99	7.0E-25	AA483944.1	EST_HUMAN	ne2e10.s1 NCI_CGAP_Kid1 Homo sapiens cDNA clone IMAGE:911754 similar to contains MER1 b2
8160	20701	33616	5.07	7.0E-25	AA468646.1	EST_HUMAN	MER1 repetitive element ;
11547	23995	37067	9.93	7.0E-25	AA583540.1	EST_HUMAN	repetitive element ;
7085	18084	36752	4.4	6.0E-25	W87523.1	EST_HUMAN	n25h06.s1 NCI_CGAP_P1 Homo sapiens cDNA clone IMAGE:914843 similar to SW:R14A_YEAST
7706	20215	33103	10.77	6.0E-25	7305360	NT	zh65h07.r1 Soares fetal liver spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:416989 5'
11198	23701	36752	4.55	5.0E-25	AW979107.1	EST_HUMAN	Mus musculus otogelin (Otog), mRNA
1498	14088	26828	2.75	4.0E-25	T98107.1	EST_HUMAN	EST1391217 MAGS resequences, MAGP Homo sapiens cDNA
3448	16056		3.2	4.0E-25	AW887671.1	EST_HUMAN	y558h04.r1 Soares fetal liver spleen_1NFLS Homo sapiens cDNA clone IMAGE:121783 5'
3974	16572	29042	1.42	4.0E-25	AF000368.1	NT	PM3-O10083-280200-001-g07 OT0083 Homo sapiens cDNA
4407	16992		4.05	4.0E-25	BE170957.1	EST_HUMAN	Rattus norvegicus voltage-gated sodium channel mRNA, complete cds
3362	15970	28447	3.73	3.0E-25	8923321	NT	QV3-HT0543-140400-149-e11 HT0543 Homo sapiens cDNA
3362	15970	28448	3.73	3.0E-25	8923321	NT	Homo sapiens hypothetical protein FLJ20344 (FLJ20344), mRNA
5022	17586	30039	0.69	3.0E-25	P29622	SWISSPROT	Homo sapiens hypothetical protein FLJ20344 (FLJ20344), mRNA
6728	19322	32127	0.84	3.0E-25	AA603590.1	EST_HUMAN	Homo sapiens hypothetical protein FLJ20344 (FLJ20344), mRNA
8279	20820	33739	3.84	3.0E-25	AL163210.2	NT	KALLISTATIN PRECURSOR (KALLIKREIN INHIBITOR) (PROTEASE INHIBITOR 4)
10911	23430	36450	2.02	3.0E-25	AA579013.1	EST_HUMAN	np27b02.s1 NCI_CGAP_P122 Homo sapiens cDNA clone IMAGE:1117515 3' similar to gb:M61866 ZINC
1392	13986	26513	9.82	2.0E-25	5032158	NT	FINGER PROTEIN 85 (HUMAN);
2347	14918	27492	7.6	2.0E-25	BE888016.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C010
2858	15142	27711	3.84	2.0E-25	P17008	SWISSPROT	Homo sapiens chromosome 21 segment HS21C010
4268	16954	26301	2.04	2.0E-25	P17008	SWISSPROT	repetitive element ;
4268	16954	26302	2.04	2.0E-25	P17008	SWISSPROT	Homo sapiens transducin (beta)-like 1 (TBL1), mRNA
9680	22179	35154	1.9	2.0E-25	AL449573.1	EST_HUMAN	601511530F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3913087 5'
387	13033	25522	0.71	1.0E-25	AL040229.1	EST_HUMAN	40S RIBOSOMAL PROTEIN S16
1291	13986		1.67	1.0E-25	9635487	NT	40S RIBOSOMAL PROTEIN S16

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2478	15045	27613	1.13	1.0E-25	Q06055	SWISSPROT	ATP SYNTHASE LIPID-BINDING PROTEIN P2 PRECURSOR (ATPASE PROTEIN 9) (SUBUNIT C)
4984	17558	30001	3.09	1.0E-25	BE102737.1	EST_HUMAN	PM1-HT0454-080100-002-H09 HT0454 Homo sapiens cDNA
6883	19279		0.85	1.0E-25	AA189080.1	EST_HUMAN	zq45b06 s1 Stratagene hNT neuron (#937233) Homo sapiens cDNA clone IMAGE:632627 3' similar to contains Alu repetitive element;
6890	24775	32460	3.08	1.0E-25	AA582690.1	EST_HUMAN	ns54h11.s1 NCI_CGAP_Kid6 Homo sapiens cDNA clone IMAGE:1087749 3'
7855	20397	33303	4.27	1.0E-25	AA709079.1	EST_HUMAN	zf95g04.s1 Soares_fetal_heart_NbHH19W Homo sapiens cDNA clone IMAGE:384822 3' similar to contains
9465	21890	34946	0.66	1.0E-25	X60660.1	NT	PTR5.13 PTR5 repetitive element ;
9465	21890	34947	0.66	1.0E-25	X60660.1	NT	R. retus RY2G5 mRNA for a potential ligand-binding protein
10849	23370	36389	3.71	1.0E-25	U93163.1	NT	R. retus RY2G5 mRNA for a potential ligand-binding protein
11787	24171	36777	1.9	1.0E-25	D14547.1	NT	Homo sapiens IMAGE-B2 (MAGE-B2), MAGE-B3 (MAGE-B3), MAGE-B4 (MAGE-B4), and MAGE-B1 (MAGE-B1) genes, complete cds
11787	24171	36778	1.9	1.0E-25	D14547.1	NT	Human DNA, SINE repetitive element
2523	15087	27660	1.57	9.0E-26	AL163218.2	NT	Human DNA, SINE repetitive element
11645	24828		1.69	9.0E-26	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C018
5872	18494		1.55	8.0E-26	D14547.1	NT	Homo sapiens chromosome 21 segment HS21C085
1921	14214	26745	0.92	7.0E-26	AF003528.1	NT	Human DNA, SINE repetitive element
4052	16649	28117	1.16	7.0E-26	X89211.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
4239	16827	29276	2.04	7.0E-26	AW340163.1	EST_HUMAN	H. sapiens DNA for endogenous retroviral like element
5819	18443	31165	0.86	7.0E-26	AL163202.2	NT	hd02e12.x1 Soares_NFL_I_GBC_S1 Homo sapiens cDNA clone IMAGE:2906366 3'
11520	23968		8.46	7.0E-26	AA115895.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C002
12376	24544		3.49	7.0E-26	AW954559.1	EST_HUMAN	z30c008.r1 Stratagene neuroepithelium NT2RAMI 937234 Homo sapiens cDNA clone IMAGE:548943 5' similar to gb:M14338 VITAMIN K-DEPENDENT PROTEIN S PRECURSOR (HUMAN);
2267	14841	27418	2.32	6.0E-26	AF028308.1	NT	EST366629 MAGE resequences, MAGC Homo sapiens cDNA
3390	15998	28476	1.37	6.0E-26	AA206131.1	EST_HUMAN	Homo sapiens chromosome 9 duplication of the T cell receptor beta locus and trypsinogen gene families
10426	23920	35922	0.48	6.0E-26	AL163202.2	NT	zq52h04.r1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone IMAGE:645271 5'
10426	22920	35923	0.48	6.0E-26	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
11531	23979	37049	5.92	6.0E-26	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C002
1219	13819	26334	3.55	5.0E-26	AI708235.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C010
1219	13819	26335	3.55	5.0E-26	AI708235.1	EST_HUMAN	as38h08.x1 Barstead aorta HPLRB6 Homo sapiens cDNA clone IMAGE:2319519 3' similar to WP:F49C12.11 CE03371 ;
1219	13819	26335	3.55	5.0E-26	AI708235.1	EST_HUMAN	as38h08.x1 Barstead aorta HPLRB6 Homo sapiens cDNA clone IMAGE:2319519 3' similar to WP:F49C12.11 CE03371 ;

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1591	14184		2.25	4.0E-26	AA329548.1	EST_HUMAN	EST33448 Embryo, 12 week II Homo sapiens cDNA 5' end
9333	21847		3.53	4.0E-26	7657870	NT	Homo sapiens upstream binding transcription factor, RNA polymerase I (UBTF), mRNA
10539	23078	36090	3.69	4.0E-26	BE266187.1	EST_HUMAN	801191345F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3535210 5'
1796	14386	26930	1.2	3.0E-26	D14547.1	NT	Human DNA, SINE repetitive element
2046	14628	27197	1	3.0E-26	AL045855.2	EST_HUMAN	DKFZp434066_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434066 5'
2077	14657		2.22	3.0E-26	AA115895.1	EST_HUMAN	zn30408_r1 Striatagene neuroepithelium NT2RAMI 937234 Homo sapiens cDNA clone IMAGE:548943 5'
3846	16445	28908	1.48	3.0E-26	AA152464.1	EST_HUMAN	similar to gb:MI4338 VITAMIN K-DEPENDENT PROTEIN S PRECURSOR (HUMAN); zo30110_r1 Striatagene colon (#937204) Homo sapiens cDNA clone IMAGE:588427 5' similar to TR:G895374
3846	16445	28908	1.48	3.0E-26	AA152464.1	EST_HUMAN	G895374 THYROID RECEPTOR INTERACTOR ; zo30110_r1 Striatagene colon (#937204) Homo sapiens cDNA clone IMAGE:588427 5' similar to TR:G895374
3846	16445	28908	1.48	3.0E-26	AA152464.1	EST_HUMAN	G895374 THYROID RECEPTOR INTERACTOR ; zo30110_r1 Striatagene colon (#937204) Homo sapiens cDNA clone IMAGE:588427 5' similar to TR:G895374
6891	19489	32311	6.04	3.0E-26	BF245458.1	EST_HUMAN	801864963F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:4083278 5'
10804	23138		1.97	3.0E-26	AF038405.1	NT	Homo sapiens MLL (MLL) gene, exons 1-3, and partial cds
11442	23692	36957	2.58	3.0E-26	AW875651.1	EST_HUMAN	QV2-PT0012-040400-124-a05 PT0012 Homo sapiens cDNA
11442	23692	36958	2.58	3.0E-26	AW875651.1	EST_HUMAN	QV2-PT0012-040400-124-a05 PT0012 Homo sapiens cDNA
11472	23922	36992	13.09	3.0E-26	AA583173.1	EST_HUMAN	nm37d05.s1 NCL_CGAP_GC5 Homo sapiens cDNA clone IMAGE:1086057 3' similar to contains OFR.11 OFR repetitive element ;
12566	24665		2.21	3.0E-26	AW073434.1	EST_HUMAN	xa57b09.x1 NCL_CGAP_HSC2 Homo sapiens cDNA clone IMAGE:2570873 3' similar to contains MER30.11 MER30 repetitive element ;
12681	24732	30857	1.48	3.0E-26	AF165520.1	NT	Homo sapiens phorbol 1 protein (PB) mRNA, complete cds
710	13331	25818	5.38	2.0E-26	AL163282.2	NT	Homo sapiens chromosome 21 segment HS21C082
1909	14494		2.42	2.0E-26	AL036099.2	EST_HUMAN	DKFZp566L171_s1 568 (synonym: hnf2d) Homo sapiens cDNA clone DKFZp566L171 3'
3298	15890	28363	4.94	2.0E-26	X88694.1	NT	M.musculus mRNA for astrocytic phosphoprotein, PEA-15
10633	23165		3.35	2.0E-26	D87875.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
11098	23807	36847	5.24	2.0E-26	AB01412.1	EST_HUMAN	tc89a01.x1 NCL_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2185416 3' similar to contains Alu repetitive element;contains element MER20 MER20 repetitive element ;
11296	23748		2.17	2.0E-26	AF055066.1	NT	Homo sapiens MHC class 1 region
11894	24237		1.65	2.0E-26	AB037859.1	NT	Homo sapiens mRNA for KIAA1438 protein, partial cds
12101	25005	30612	3.03	2.0E-26	BE11435947	NT	Homo sapiens chromosome 12 open reading frame 3 (C12ORF3), mRNA
142	12807	25295	13.71	1.0E-26	BE170371.1	EST_HUMAN	QV4-HT0538-020300-123-a02 HT0538 Homo sapiens cDNA
2091	14871	27241	1.5	1.0E-26	AL039363.2	EST_HUMAN	DKFZp434H1910_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434H1910 5'
2598	15160	27728	1.48	1.0E-26	BE814995.1	EST_HUMAN	MR2-BN0114-240500-030-g07 BN0114 Homo sapiens cDNA
2710	15287		6.31	1.0E-26	AF261085.1	NT	Homo sapiens glyceraldehyde-3-phosphate dehydrogenase (GADPH) mRNA, complete cds
6927	19586		2.52	1.0E-26	BE165980.1	EST_HUMAN	MR3-HT0487-150200-113-g01 HT0487 Homo sapiens cDNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10772	23296		2.98	1.0E-26	AL038487.1	EST_HUMAN	DKFZp566C2146_r1 568 (synonym: hfkd2) Homo sapiens cDNA clone DKFZp566C2146 5'
12151	29084		2.79	1.0E-26	H55093.1	EST_HUMAN	CHR220032 Chromosome 22 exon Homo sapiens cDNA clone C22_45 5'
12825	24703		1.27	1.0E-26	AW408742.1	EST_HUMAN	UI-HF-BM0-adv-d-10-0-UI.r1 NIH_MGC_38 Homo sapiens cDNA clone IMAGE:3063210 5'
7584	20099		1.17	9.0E-27	BF371227.1	EST_HUMAN	RC8-FN0138-110800-022-A02 FN0138 Homo sapiens cDNA
9227	21949		4	9.0E-27	U93163.1	NT	Homo sapiens MAGE-B2 (MAGE-B2), MAGE-B3 (MAGE-B3), MAGE-B4 (MAGE-B4), and MAGE-B1 (MAGE-B1) genes, complete cds
11648	24080		6.15	9.0E-27	BF445556.1	EST_HUMAN	nao03c07.x1 NCL_CGAP_P128 Homo sapiens cDNA clone IMAGE:3253844 3' similar to contains OFR.t1 OFR repetitive element ;
11	12680	25146	3.07	8.0E-27	AI831462.1	EST_HUMAN	w49c04.x1 NCL_CGAP_Lu19 Homo sapiens cDNA clone IMAGE:2406150 3' similar to contains THIR.b2 THIR repetitive element ;
583	13213		3.36	8.0E-27	AL163227.2	NT	Homo sapiens chromosome 21 segment HS21C027
1461	14053	26585	28.2	8.0E-27	AW162737.1	EST_HUMAN	au87h08.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2783295 3' similar to gb:K00558 TUBULIN ALPHA-1 CHAIN (HUMAN);
1461	14053	26586	28.2	8.0E-27	AW162737.1	EST_HUMAN	au87h08.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2783295 3' similar to gb:K00558 TUBULIN ALPHA-1 CHAIN (HUMAN);
2212	14787	27362	1.48	8.0E-27	AW864776.1	EST_HUMAN	PM2-SN0018-220300-002-a07 SN0018 Homo sapiens cDNA
3219	15831	28310	1.89	8.0E-27	P12236	SWISSPROT	ADP.ATP CARRIER PROTEIN, LIVER ISOFORM T2 (ADP/ATP TRANSLOCASE 3) (ADENINE NUCLEOTIDE TRANSLOCATOR 3) (ANT 3)
3398	16004	28485	0.59	8.0E-27	AF181897.1	NT	Homo sapiens WRN (WRN) gene, complete cds
5873	18495	31221	1.14	8.0E-27	AV732214.1	EST_HUMAN	AV732214 HTF Homo sapiens cDNA clone HTFBCB06 5'
7054	18073		2.9	8.0E-27	BE926580.1	EST_HUMAN	MR4-BT0398-250800-204-d06 BT0398 Homo sapiens cDNA
7111	19451	32267	2.49	8.0E-27	N84970.1	EST_HUMAN	J1751F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA clone J1751 5' similar to REPETITIVE ELEMENT L1
9136	21671	34613	1.35	8.0E-27	AW857579.1	EST_HUMAN	CM1-CT0315-091298-063-d07 CT0315 Homo sapiens cDNA
9136	21671	34614	1.35	8.0E-27	AW857579.1	EST_HUMAN	CM1-CT0315-091298-063-d07 CT0315 Homo sapiens cDNA
712	13333		1.39	7.0E-27	Z70864.1	NT	Human endogenous retroviral element HC2
5252	17815		2.66	7.0E-27	AW629172.1	EST_HUMAN	h15h12.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2975879 3' similar to TR:O76040 O76040 ORF2: FUNCTION UNKNOWN ;
8791	21330		0.77	7.0E-27	D86984.1	NT	Human mRNA for KIAA0231 gene, partial cds
10628	23160		4.39	7.0E-27	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
12298	24495		3.27	7.0E-27	AV723365.1	EST_HUMAN	AV723365 HTB Homo sapiens cDNA clone HTBAHE02 5'
10805	23139	36151	11.92	6.0E-27	M26697.1	NT	Human nuclear protein (B23) mRNA, complete cds
11621	24063	37127	2.33	6.0E-27	U93163.1	NT	Homo sapiens MAGE-B2 (MAGE-B2), MAGE-B3 (MAGE-B3), MAGE-B4 (MAGE-B4), and MAGE-B1 (MAGE-B1) genes, complete cds

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7752	20260		0.79	5.0E-27	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
10136	22631	35619	2.86	5.0E-27	BF666614.1	EST_HUMAN	602121491F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4278527 5'
10136	22631	35620	2.86	5.0E-27	BF666614.1	EST_HUMAN	602121491F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4278527 5'
2423	14961	27564	4.86	4.0E-27	D25303.1	NT	Human mRNA for integrin alpha subunit, complete cds
6842	19432	32247	1.37	4.0E-27	9910569	NT	Mus musculus sperm tail associated protein (Stap), mRNA
7890	20422		1.14	4.0E-27	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
7925	20467		1.22	4.0E-27	AF078779.1	NT	Rattus norvegicus putative four repeat ion channel mRNA, complete cds
9659	22158	35130	0.8	4.0E-27	AW880859.1	EST_HUMAN	QV0-OT0033-070300-152-b10 OT0033 Homo sapiens cDNA
11473	23923	36993	2.38	4.0E-27	X89211.1	NT	H. sapiens DNA for endogenous retroviral like element
2085	14866	27237	6.19	3.0E-27	X89211.1	NT	R. rattus RYA3 mRNA for a potential ligand-binding protein
4358	16945	29387	1.56	3.0E-27	BE071924.1	EST_HUMAN	PM0-BT0527-080100-001-d11 BT0527 Homo sapiens cDNA
5549	18181	30598	6.22	3.0E-27	AA077705.1	EST_HUMAN	7B44C08 Chromosome 7 Fetal Brain cDNA Library Homo sapiens cDNA clone 7B44C08
9229	21951	34900	3.67	3.0E-27	BF035327.1	EST_HUMAN	601458531F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3682086 5'
45	12724	25185	29.69	2.0E-27	AF054187.1	NT	Homo sapiens alpha NAC mRNA, complete cds
1940	14524		12.18	2.0E-27	AA565345.1	EST_HUMAN	nk01b10.s1 NCI_CGAP_P111 Homo sapiens cDNA clone IMAGE:1000699 similar to gb:M17886.60S
3143	15757		12.54	2.0E-27	AW629172.1	EST_HUMAN	h151h12.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2875879 3' similar to TR:O76040
3281	15873	28353	1.74	2.0E-27	AF111187.2	NT	O76040 ORF2: FUNCTION UNKNOWN. ;
3281	15873	28354	1.74	2.0E-27	AF111187.2	NT	Homo sapiens jun dimerization protein gene, partial cds; cfos gene, complete cds; and unknown gene
6779	19370	32185	0.68	2.0E-27	H02655.1	EST_HUMAN	Homo sapiens jun dimerization protein gene, partial cds; cfos gene, complete cds; and unknown gene
8034	20578	33481	1.24	2.0E-27	A186347.1	EST_HUMAN	y36e01.r1 Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:150840 5' similar to SP:HMGC_MOUSE_Q02591_HOMEOBOX_PROTEIN ;
9193	21710		2.25	2.0E-27	AA551527.1	EST_HUMAN	w28607.x1 NCI_CGAP_U11 Homo sapiens cDNA clone IMAGE:2428268 3'
9707	22205	35178	1	2.0E-27	X60658.1	NT	nh08h05.s1 NCI_CGAP_Thyl1 Homo sapiens cDNA clone IMAGE:943737 similar to contains L1.3 L1 repetitive element ;
9948	22443	35421	1.03	2.0E-27	M78590.1	EST_HUMAN	R. rattus RYA3 mRNA for a potential ligand-binding protein
9948	22443	35422	1.03	2.0E-27	M78590.1	EST_HUMAN	EST00738 Fetal brain, Strategene (cat#936206) Homo sapiens cDNA clone HFBCF07
10834	23555	36370	3.38	2.0E-27	AU121885.1	EST_HUMAN	EST00738 Fetal brain, Strategene (cat#936206) Homo sapiens cDNA clone HFBCF07
11360	14524		15.86	2.0E-27	AA565345.1	EST_HUMAN	AU121885 MAMMA1 Homo sapiens cDNA clone MAMMA1000746 5'
461	13085		1.17	1.0E-27	AL163246.2	NT	nk01b10.s1 NCI_CGAP_P111 Homo sapiens cDNA clone IMAGE:1000699 similar to gb:M17886.60S
							ACIDIC RIBOSOMAL PROTEIN P1 (HUMAN);
							Homo sapiens chromosome 21 segment HS21C046

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Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1034	13844	26157	1.25	1.0E-27	AB028698.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
4155	16747		1.02	1.0E-27	BE350127.1	EST_HUMAN	h109g01.x1 NCL_CGAP_Kid13 Homo sapiens cDNA clone IMAGE:3146256 3' similar to contains MER29.b3 MER29 repetitive element ;
6665	19261	32065	6.88	1.0E-27	6005855	NT	Homo sapiens Retina-derived POU-domain factor-1 (RPF-1), mRNA
6952	19529	32353	1.86	1.0E-27	F30158.1	EST_HUMAN	HSPD20481 HM3 Homo sapiens cDNA clone s4000095C10
6952	19529	32354	1.86	1.0E-27	F30158.1	EST_HUMAN	HSPD20461 HM3 Homo sapiens cDNA clone s4000095C10
8546	21085	34008	0.7	1.0E-27	AB007923.1	NT	Homo sapiens mRNA for KIAA0454 protein, partial cds
8916	21454		1.89	1.0E-27	BE079780.1	EST_HUMAN	RC6-BT0627-140200-011-E08 BT0627 Homo sapiens cDNA
9638	22138	35104	2.68	1.0E-27	D87449.1	NT	Human mRNA for KIAA0260 gene, partial cds
11551	23999	37071	3.65	1.0E-27	AF111083.1	NT	Bos taurus latrophilin 3 splice variant bbah mRNA, complete cds
148	12810		2.02	9.0E-28	BE348399.1	EST_HUMAN	hwt1c11.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3183188 3' similar to TR:Q07314 Q07314 SECRETED NEUREXIN III-ALPHA-C PRECURSOR, [3] TR:Q07280 TR:Q07313 ;
333	12985	25472	2.19	9.0E-28	AU128280.1	EST_HUMAN	AU128280 NT2RP1 Homo sapiens cDNA clone NT2RP1000443 5'
11732	24137		4.71	9.0E-28	BF377859.1	EST_HUMAN	CM2-TN0140-070900-372-g01 TN0140 Homo sapiens cDNA
12066	24923		4.41	8.0E-28	AW157571.1	EST_HUMAN	au83h08.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2782911 3' similar to TR:O60302 O60302 KIAA0555 PROTEIN, contains element MER22 repetitive element ;
1223	13823	26338	16.9	7.0E-28	AU142750.1	EST_HUMAN	AU142750 Y79AA1 Homo sapiens cDNA clone Y79AA1000824 5'
11066	23578	36816	3.08	7.0E-28	11417866	NT	Homo sapiens gamma-glutamyltransferase-like activity 1 (GGTLA1), mRNA
11688	24104		2.37	7.0E-28	AV735348.1	EST_HUMAN	AV735348 CB Homo sapiens cDNA clone CBFACA12 5'
8860	21389		1.04	8.0E-28	AF016052.1	NT	Homo sapiens zinc finger protein ZNF191 (ZNF191) gene, complete cds
12348	24527		12.5	6.0E-28	AA504562.1	EST_HUMAN	aa60e03.r1 NCL_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:325340 5' similar to contains Alu repetitive element; contains element PTR5 repetitive element ;
340	12992		2.28	5.0E-28	AI921003.1	EST_HUMAN	w018c07.x1 NCL_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2455692 3' similar to contains THR.b1 THR repetitive element ;
4081	16677	29137	1.79	5.0E-28	R79762.1	EST_HUMAN	y89f10.r1 Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:146443 5'
2654	15213	27786	1.12	4.0E-28	AW195086.1	EST_HUMAN	xn33c09.x1 NCL_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2895504 3' similar to SW:GG95_HUMAN Q08379 GOLGIN-95 ;
3005	15621	28098	0.76	4.0E-28	4505316	NT	Homo sapiens myosin phosphatase, target subunit 1 (MYPT1), mRNA
3142	15756	28223	3.13	4.0E-28	BE409100.1	EST_HUMAN	601300703F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3635305 5'
7366	19894	32757	1.79	4.0E-28	AI198941.1	EST_HUMAN	q669f10.x1 Soares testis NHT Homo sapiens cDNA clone IMAGE:1755019 3' similar to gb:M19503 LINE-1 REVERSE TRANSCRIPTASE HOMOLOG (HUMAN);
10745	23269		4.9	4.0E-28	AF029308.1	NT	Homo sapiens chromosome 9 duplication of the T cell receptor beta locus and trypsinogen gene families

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10885	23406		25.24	4.0E-28	AB038241.1	NT	Felis catus GAPDH mRNA for glyceraldehyde-3-phosphate dehydrogenase, complete cds
10904	19894	32757	3.33	4.0E-28	A118894.1	EST_HUMAN	q16610.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1755019 3' similar to gb:M19503 LINE-1 REVERSE TRANSCRIPTASE HOMOLOG (HUMAN);
12116	24375		1.71	4.0E-28	AW854244.1	EST_HUMAN	RC3-CT0254-240400-210-112 CT0254 Homo sapiens cDNA
12657	24728		72.51	4.0E-28	AW157571.1	EST_HUMAN	au83108.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2782911 3' similar to TR:O60302 O60302 KIAA0555 PROTEIN; contains element MER22 repetitive element;
1328	13920		1.95	3.0E-28	AF155382.1	NT	Homo sapiens metalloprotease-like, disintegrin-like, cysteine-rich protein 2 epsilon (ADAM22) mRNA, complete cds
8781	21300	34221	3.77	3.0E-28	BF354030.1	EST_HUMAN	MR3-HT0713-280500-013-109 HT0713 Homo sapiens cDNA
10815	23336	36349	2.08	3.0E-28	U53588.1	NT	Homo sapiens MHC class 1 region
12147	24390		2.53	3.0E-28	A1831991.1	EST_HUMAN	wj98107.x1 NCI_CGAP_Lym12 Homo sapiens cDNA clone IMAGE:2410885 3' similar to contains Alu repetitive element; contains element HGR repetitive element;
12284	24486		1.77	3.0E-28	BE082801.1	EST_HUMAN	RC2-BT0842-210200-013-103 BT0842 Homo sapiens cDNA
92	12768	25251	8.71	2.0E-28	BE062167.1	EST_HUMAN	RC1-BT0254-220300-019-c05 BT0254 Homo sapiens cDNA
1207	13807	28320	9.63	2.0E-28	Y11107.3	NT	Homo sapiens ITGB4 gene for integrin beta 4 subunit, exons 3-41
2517	15081	27654	2.47	2.0E-28	A1348634.1	EST_HUMAN	qo35608.x1 NCI_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1810483 3' similar to contains L1.b2 L1 repetitive element;
3407	16016	28495	0.64	2.0E-28	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
6449	19050	31836	1.2	2.0E-28	BF224402.1	EST_HUMAN	hr78c03.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3134404 3' similar to contains LOR1.b1 LOR1 repetitive element;
6472	19073		5.22	2.0E-28	BF212905.1	EST_HUMAN	601814196F1 NIH_MGC_54 Homo sapiens cDNA clone IMAGE:4048751 5'
7888	20530	33437	0.77	2.0E-28	AF005273.1	NT	Sus scrofa domestica submaxillary apomucin mRNA, complete cds
9505	22005		11	2.0E-28	AW972305.1	EST_HUMAN	EST384384 MAGE resequences, MAGL Homo sapiens cDNA
11481	23931	37002	1.91	2.0E-28	AF224669.1	NT	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
12127	24383		1.74	2.0E-28	H06376.1	EST_HUMAN	y79c09.r1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:44300 5'
1528	14118	26655	3.52	1.0E-28	D38044.1	NT	Human gene for Ah-receptor, exon 7-9
2261	14835	27413	1.84	1.0E-28	BF333236.1	EST_HUMAN	QV1-BT0821-120900-360-b03 BT0821 Homo sapiens cDNA
2708	15265	27832	1.38	1.0E-28	AF000895.1	NT	Homo sapiens ubiquitous TPR motif, Y isoform (UTY) mRNA, alternative transcript 2, complete cds
4688	17250		0.96	1.0E-28	U09410.1	NT	Human zinc finger protein ZNF131 mRNA, partial cds
7801	20344		7.69	1.0E-28	11429885	NT	Homo sapiens similar to ribosomal protein L12 (H. sapiens) (LOC83081), mRNA
7861	20503		3.2	1.0E-28	8922793	NT	Homo sapiens hypothetical protein FLJ10968 (FLJ10968), mRNA
9202	21719	34663	4.72	1.0E-28	AA308744.1	EST_HUMAN	EST179815 HCC cell line (metastasis to liver in mouse) II Homo sapiens cDNA 5' end similar to similar to retroviral LTR

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9790	22288	35272	9.67	1.0E-28	4758431	NT	Homo sapiens gamma-glutamyltransferase-like activity 1 (GGTLA1), mRNA
9790	22288	35273	9.67	1.0E-28	4758431	NT	Homo sapiens gamma-glutamyltransferase-like activity 1 (GGTLA1), mRNA
11693	24108		10.45	1.0E-28	AA054182.1	EST_HUMAN	z61c01.r1 Soares retina N2b4HR Homo sapiens cDNA clone IMAGE:380448 5'
12484	24811		1.56	1.0E-28	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047
12596	25034	30502	3.5	9.0E-29	AW663987.1	EST_HUMAN	h76g06.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2978286 3'
12245	24456		5.36	8.0E-29	Q00130	SWISSPROT	HYPOTHETICAL GENE 50 PROTEIN
1846	14238	28773	1.04	7.0E-29	AW966447.1	EST_HUMAN	EST378521 MAGI resequences, MAGI Homo sapiens cDNA
3607	16211		0.91	7.0E-29	BE254708.1	EST_HUMAN	601114980F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3355367 5'
12644	24718		13.85	7.0E-29	AJ132352.1	NT	Rattus norvegicus mRNA for 45 kDa secretory protein, partial
621	13248	25722	7.35	6.0E-29	AI836748.1	EST_HUMAN	wp69b01.x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2466985 3' similar to TR.O15475
12002	24307		9.28	6.0E-29	BE940436.1	EST_HUMAN	O15475 UNNAMED HERV-H PROTEIN ; contains LTR7.b1 LTR7 repetitive element ;
5138	17710		1.02	5.0E-29	AL163203.2	NT	RC3-JT0062-210800-021-c05 UT0082 Homo sapiens cDNA
8666	21205		7.83	5.0E-29	AW887541.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C003
12276	24480		1.32	5.0E-29	BE612449.1	EST_HUMAN	RC3-OT0091-170300-011-c12 OT0091 Homo sapiens cDNA
							601451827F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3855726 5'
3269	15881		2.92	4.0E-29	AI752367.1	EST_HUMAN	cn15c02.x1 Normal Human Trabecular Bone Cells Homo sapiens cDNA clone NHTBC_cn15c02 random
6160	18773		6.52	4.0E-29	BE164930.1	EST_HUMAN	QV1-HT0471-280300-121-a05 HT0471 Homo sapiens cDNA
8025	20567	33469	0.92	4.0E-29	AI678101.1	EST_HUMAN	wd35g06.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2330170 3' similar to contains
							MER29.12 MER29 repetitive element ;
8025	20567	33470	0.92	4.0E-29	AI678101.1	EST_HUMAN	wd35g06.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2330170 3' similar to contains
8680	21219	34139	6.03	4.0E-29	J04988.1	NT	MER29.12 MER29 repetitive element ;
4506	17090	29538	1.58	3.0E-29	AB042287.1	NT	Human 90 kD heat shock protein gene, complete cds
4839	17417	29870	1.28	3.0E-29	BF333236.1	EST_HUMAN	Homo sapiens PTP gene for 6-pyruvoyltransferin synthase, complete cds
6088	18704	31452	0.98	3.0E-29	BE314018.1	EST_HUMAN	QV1-BT0821-120900-360-b03 BT0821 Homo sapiens cDNA
8668	21207	34124	2.6	3.0E-29	D38044.1	NT	601152657F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3508527 5'
							Human gene for Ahr-receptor, exon 7-9
9224	21740	34683	1.93	3.0E-29	AW303317.1	EST_HUMAN	xv17f03.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2813405 3' similar to contains Alu
9450	21976		2.01	3.0E-29	AL163246.2	NT	repetitive element; contains MER19.12 MER19 repetitive element ;
							Homo sapiens chromosome 21 segment HS21C046
9869	22366		0.76	3.0E-29	BE350127.1	EST_HUMAN	ht09g01.x1 NCI_CGAP_Kid13 Homo sapiens cDNA clone IMAGE:3146256 3' similar to contains MER29 b3
							MER29 repetitive element ;
11148	23656	36698	1.88	3.0E-29	AA403053.1	EST_HUMAN	z62b01.r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:726889 5' similar to TR.G1335769
							G1335769 GAG-POL POLYPROTEIN ;

Table 4

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11891	24234		2.61	3.0E-29	D63882.1	NT	Human HsLIM15 mRNA for HsLIM15, complete cds
12553	25044		1.95	3.0E-29	D63882.1	NT	Human HsLIM15 mRNA for HsLIM15, complete cds
518	13150	25632	1.07	2.0E-29	AF084869.1	NT	Homo sapiens envelope protein RIC-8 (env) gene, complete cds
518	13150	25633	1.07	2.0E-29	AF084869.1	NT	Homo sapiens envelope protein RIC-8 (env) gene, complete cds
1580	14173	26703	7.26	2.0E-29	A1963804.1	EST_HUMAN	wr65d10.x1 NCI_CGAP_U11 Homo sapiens cDNA clone IMAGE:2492563 3' similar to TR:O15548 O15548
1580	14173	26704	7.26	2.0E-29	A1963804.1	EST_HUMAN	HERV-E ENVELOPE GLYCOPROTEIN ;
4388	18953	28393	2.01	2.0E-29	AL163288.2	NT	wr65d10.x1 NCI_CGAP_U11 Homo sapiens cDNA clone IMAGE:2492563 3' similar to TR:O15548 O15548
5991	18611	31346	0.86	2.0E-29	A1082459.1	EST_HUMAN	HERV-E ENVELOPE GLYCOPROTEIN ;
6327	18933	31708	1.45	2.0E-29	A1806418.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C068
7560	18933	31708	1.2	2.0E-29	A1806418.1	EST_HUMAN	os71ed04.x1 NCI_CGAP_GC2 Homo sapiens cDNA clone IMAGE:1610814 3' similar to contains L1.12 L1
7917	20459	33366	1.15	2.0E-29	BE667157.1	EST_HUMAN	repetitive element ;
8514	21053	33975	0.55	2.0E-29	10567821	NT	w127g07.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2356860 3' similar to contains
8514	21053	33978	0.55	2.0E-29	10567821	NT	element MER6 repetitive element ;
9427	21936	34884	3.74	2.0E-29	AL163248.2	NT	element MER6 repetitive element ;
9427	21936	34885	3.74	2.0E-29	AL163248.2	NT	601442206F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3846648 5'
10138	22633	35622	3.15	2.0E-29	AL163248.2	NT	Homo sapiens DNA-binding protein (LOC56242), mRNA
10138	22633	35623	3.15	2.0E-29	AL163248.2	NT	Homo sapiens DNA-binding protein (LOC56242), mRNA
11350	23805		2.03	2.0E-29	11425108	NT	Homo sapiens chromosome 21 segment HS21C048
11350	23842		2.46	2.0E-29	AW880701.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C048
11635	24075		1.93	2.0E-29	AL163227.2	NT	Homo sapiens chromosome 21 segment HS21C048
8727	21266	34188	7.44	1.0E-29	AW983880.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C048
10503	22987	36006	0.76	1.0E-29	X60656.1	NT	Homo sapiens chromosome 21 segment HS21C048
6696	19292	32096	3.08	9.0E-30	AA761215.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C027
11773	24182		2.08	9.0E-30	11422745	NT	Homo sapiens chromosome 21 segment HS21C027
6461	18062		9.33	8.0E-30	F08698.1	EST_HUMAN	RC1-HN0003-220300-021-b04 HN0003 Homo sapiens cDNA
8214	20755	33669	2.65	8.0E-30	AA383873.1	EST_HUMAN	R. rattus RYA3 mRNA for a potential ligand-binding protein
8817	21156	34069	4.64	8.0E-30	A1557072.1	EST_HUMAN	n220c07 s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1288332 3' similar to contains MER4.b1
1562	14154		0.91	7.0E-30	BE091133.1	EST_HUMAN	MER4 repetitive element ;
							Homo sapiens zinc/iron regulated transporter-like (ZIRTL), mRNA
							HSC23F051 normalized infant brain cDNA Homo sapiens cDNA clone c-23105
							EST197317 Thymus I Homo sapiens cDNA 5' end similar to EST containing O family repeat
							PT12.1_13_B11.r tumor2 Homo sapiens cDNA 3'
							PM4-BT0724-150400-004-d11 BT0724 Homo sapiens cDNA

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Single Exon Probes Expressed In Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7779	20291	33190	1.28	7.0E-30	BF05327.1	EST_HUMAN	601458531F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3862086 5'
1810	14400	28945	1.35	6.0E-30	D25303.1	NT	Human mRNA for Integrin alpha subunit, complete cds
3224	15836	28314	2.38	6.0E-30	BE008028.1	EST_HUMAN	QV0-BN0147-290400-214-f12 BN0147 Homo sapiens cDNA
4872	15836	28314	1.1	6.0E-30	BE008028.1	EST_HUMAN	QV0-BN0147-290400-214-f12 BN0147 Homo sapiens cDNA
10432	22926	35932	0.72	6.0E-30	AF177227.1	NT	Homo sapiens CTCL tumor antigen sc20-10 mRNA, partial cds
12615	18024		1.6	6.0E-30	X51755.1	NT	Human lambda-immunoglobulin constant region complex (germline)
4085	16681	29141	39.51	5.0E-30	AI399692.1	EST_HUMAN	ig92g03.x1 NCI_CGAP_CLL1 Homo sapiens cDNA clone IMAGE:2116276 3' similar to contains Alu repetitive element
5448	24850		4.03	5.0E-30	U87931.1	NT	Human aconitase hydratase (ACO2) gene, exon 7
10767	23291		3.31	5.0E-30	AL163278.2	NT	Homo sapiens chromosome 21 segment HS21C078
11034	23548	36583	6.29	5.0E-30	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
11034	23548	36584	6.29	5.0E-30	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
2188	14764	27333	1.32	4.0E-30	AW937471.1	EST_HUMAN	QV3-DT0043-090200-080-c08 DT0043 Homo sapiens cDNA
2188	14764	27334	1.32	4.0E-30	AW937471.1	EST_HUMAN	QV3-DT0043-090200-080-c08 DT0043 Homo sapiens cDNA
8936	21375	34289	3.16	4.0E-30	AW812488.1	EST_HUMAN	CM1-ST0181-091199-035-f08 ST0181 Homo sapiens cDNA
1191	13792		3.43	3.0E-30	AI338551.1	EST_HUMAN	q493c05.x1 Soares_tetal_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:1938920 3' similar to contains MER29.b2 MER29 repetitive element
3821	16421	28883	0.87	3.0E-30	AF128893.1	NT	Homo sapiens telomerase reverse transcriptase (TERT) gene, exons 1-8
7893	20435		0.47	3.0E-30	AF078779.1	NT	Rattus norvegicus putative four repeat ion channel mRNA, complete cds
8423	20983		0.5	3.0E-30	AF078779.1	NT	Rattus norvegicus putative four repeat ion channel mRNA, complete cds
10330	22824	35820	1.69	3.0E-30	BE350127.1	EST_HUMAN	h109g01.x1 NCI_CGAP_Kid13 Homo sapiens cDNA clone IMAGE:3146256 3' similar to contains MER29.b3 MER29 repetitive element
10460	22954	35964	0.53	3.0E-30	AB032969.1	NT	Homo sapiens mRNA for KIAA1143 protein, partial cds
10460	22954	35965	0.53	3.0E-30	AB032969.1	NT	Homo sapiens mRNA for KIAA1143 protein, partial cds
11084	23596	36632	1.78	3.0E-30	P34056	SWISSPROT	TRANSCRIPTION FACTOR AP-2
703	13324	25811	1.3	2.0E-30	AW857315.1	EST_HUMAN	CM0-CT0307-310100-158-h03 CT0307 Homo sapiens cDNA
1123	13726		2.35	2.0E-30	F08688.1	EST_HUMAN	HSC23F051 normalized infant brain cDNA Homo sapiens cDNA clone c-23105
1527	14119	28656	7.23	2.0E-30	BE175877.1	EST_HUMAN	RC5-HT0582-110400-073-H08 HT0582 Homo sapiens cDNA
2740	15295	27862	9.08	2.0E-30	BE765232.1	EST_HUMAN	IL2-NT0101-280700-118-E04 NT0101 Homo sapiens cDNA
2944	15560	28034	6.74	2.0E-30	AF114156.1	NT	Homo sapiens Y-linked zinc finger protein (ZFY) gene, complete cds
3857	16455	28919	2.18	2.0E-30	AW206581.1	EST_HUMAN	U1H-B11-af0-c-12-0-U1.s1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2722558 3'
4892	17467	29922	2.07	2.0E-30	BE298945.1	EST_HUMAN	601119860F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3029438 5'
4892	17467	29923	2.07	2.0E-30	BE298945.1	EST_HUMAN	601119860F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3029438 5'
6855	19443	32259	0.92	2.0E-30	BF306337.1	EST_HUMAN	601893208F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4138993 5'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8412	20952	33871	0.81	2.0E-30	AA019103.1	EST_HUMAN	ze58c10.r1 Soares retina N2b44HR Homo sapiens cDNA clone IMAGE:363186 5'
8474	21014	33930	5.63	2.0E-30	C18939.1	EST_HUMAN	C18939 Human placenta cDNA (Tfujlwara) Homo sapiens cDNA clone GEN-570C01 5'
8570	21109	34027	3.55	2.0E-30	BE670617.1	EST_HUMAN	7e37c12.x1 NCI CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3284662 3' similar to SW:DHSA_HUMAN P31040 SUCCINATE DEHYDROGENASE [UBIQUINONE] FLAVOPROTEIN SUBUNIT PRECURSOR ;
8570	21109	34028	3.55	2.0E-30	BE670617.1	EST_HUMAN	7e37c12.x1 NCI CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3284662 3' similar to SW:DHSA_HUMAN P31040 SUCCINATE DEHYDROGENASE [UBIQUINONE] FLAVOPROTEIN SUBUNIT PRECURSOR ;
9608	22405	35380	3.21	2.0E-30	AW971568.1	EST_HUMAN	EST383657 MAGE resequences, MAGL Homo sapiens cDNA
9994	22489	35477	6.11	2.0E-30	AW470791.1	EST_HUMAN	ha33d06.x1 NCI CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2875498 3' similar to contains THR.b3 THR repetitive element ;
308	12963	25452	12.31	1.0E-30	C18939.1	EST_HUMAN	C18939 Human placenta cDNA (Tfujlwara) Homo sapiens cDNA clone GEN-570C01 5'
563	13184	25673	3.84	1.0E-30	AW468897.1	EST_HUMAN	hd30b04.x1 Soares NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2910991 3' similar to contains MER1.13 MER1 MER1 repetitive element ;
745	13365	25859	2.7	1.0E-30	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
2253	14827	27403	3.59	1.0E-30	AA684377.1	EST_HUMAN	ac77b08.s1 Stratagene lung (#837210) Homo sapiens cDNA clone IMAGE:868599 3'
2502	15066	27640	1.64	1.0E-30	BF347728.1	EST_HUMAN	602022560F1 NCI CGAP_Brn67 Homo sapiens cDNA clone IMAGE:4157991 5'
3035	15651	28129	1.36	1.0E-30	5803091	NT	Homo sapiens methionine aminopeptidase; eIF-2-associated p67 (MNPEP), mRNA
3090	15705	28177	1.06	1.0E-30	AA315045.1	EST_HUMAN	EST186868 HCC cell line (metastasis to liver in mouse) Homo sapiens cDNA 5' end
7708	20217	33105	16.59	1.0E-30	BF183230.1	EST_HUMAN	601809932F1 NIH_MGC_18 Homo sapiens cDNA clone IMAGE:4046894 5'
12288	25029		1.48	1.0E-30	AA289211.1	EST_HUMAN	EST11698 Uterus Homo sapiens cDNA 5' end
12411	24049		8.63	1.0E-30	H55593.1	EST_HUMAN	CHR220532 Chromosome 22 exon Homo sapiens cDNA clone C22_728 5'
3829	16429	28890	0.72	9.0E-31	T73025.1	EST_HUMAN	yc65e06.r1 Stratagene liver (#837224) Homo sapiens cDNA clone IMAGE:85570 5'
3829	16429	28891	0.72	9.0E-31	T73025.1	EST_HUMAN	yc65e06.r1 Stratagene liver (#837224) Homo sapiens cDNA clone IMAGE:85570 5'
8266	20807	33725	1.03	9.0E-31	R18214.1	EST_HUMAN	y99b08.r1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:30566 5' similar to gb:X12953 RAS-RELATED PROTEIN RAB-2 (HUMAN);
8266	20807	33726	1.03	9.0E-31	R18214.1	EST_HUMAN	y99b08.r1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:30566 5' similar to gb:X12953 RAS-RELATED PROTEIN RAB-2 (HUMAN);
8559	21098		1.84	9.0E-31	Z38293.1	EST_HUMAN	HS005F032 normalized infant brain cDNA Homo sapiens cDNA clone c-05f03 3'
8561	21100	34020	0.52	9.0E-31	AF076779.1	NT	Rattus norvegicus putative four repeat ion channel mRNA, complete cds
12640	24715	30867	1.89	9.0E-31	6755441	NT	Mus musculus syndecan 4 (Sdc4), mRNA
1115	13719	26230	6.84	8.0E-31	8923389	NT	Homo sapiens hypodermal protein FLJ20420 (FLJ20420), mRNA
2467	15024		4.22	8.0E-31	AL163208.2	NT	Homo sapiens chromosome 21 segment HS21C008
11801	24910		2.71	8.0E-31	AF012385.1	EST_HUMAN	AF012385 Human testis (C. De Smet) Homo sapiens cDNA clone TDP3.12b

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
740	13360		2.5	7.0E-31	AA372637.1	EST_HUMAN	EST84555 Colon adenocarcinoma IV Homo sapiens cDNA 5' end
2692	15249	27818	2.37	7.0E-31	BE326517.1	EST_HUMAN	hw05a11.x1 NCL CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3182012 3'
2692	15249	27819	2.37	7.0E-31	BE326517.1	EST_HUMAN	hw05a11.x1 NCL CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3182012 3'
8340	20881	33800	0.92	7.0E-31	AF208541.1	NT	Homo sapiens V1-vascular vasopressin receptor AVPR1A gene, promoter region and partial cds
8340	20881	33801	0.82	7.0E-31	AF208541.1	NT	Homo sapiens V1-vascular vasopressin receptor AVPR1A gene, promoter region and partial cds
9190	21707		1.62	7.0E-31	BE408611.1	EST_HUMAN	801304725F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3638310 5'
12243	24455	30958	1.53	7.0E-31	X51755.1	NT	Human lambda-immunoglobulin constant region complex (germline)
3742	16343		2.28	6.0E-31	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
8094	20635		6.98	6.0E-31	AF055066.1	NT	Homo sapiens MHC class 1 region
8273	20814	33736	0.78	6.0E-31	BE350127.1	EST_HUMAN	ht09g01.x1 NCL CGAP_KidT3 Homo sapiens cDNA clone IMAGE:3146256 3' similar to contains MER28.b3
10617	23149	36161	1.69	6.0E-31	AU119105.1	EST_HUMAN	MER28 repetitive element
11835	24199	31038	3.25	6.0E-31	AW372688.1	EST_HUMAN	AU119105 HEMBA1 Homo sapiens cDNA clone HEMBA1005050 5'
11964	24868		2	6.0E-31	BE884488.1	EST_HUMAN	RCS-BT0377-091289-031-D12 B10377 Homo sapiens cDNA
206	12867	25352	3.89	5.0E-31	M60694.1	NT	601433087F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3918524 5'
206	12867	25353	3.99	5.0E-31	M60694.1	NT	Homo sapiens type I DNA topoisomerase gene, exon 8
8382	20922		0.75	5.0E-31	BF058540.1	EST_HUMAN	Homo sapiens type I DNA topoisomerase gene, exon 8
822	13249		2.67	4.0E-31	AJ271735.1	NT	7k06f04.x1 NCL CGAP_G08 Homo sapiens cDNA clone IMAGE:3443479 3' similar to TR:Q13537 Q13537
1854	14442		2.42	4.0E-31	AL163280.2	NT	SIMILAR TO POGO ELEMENT. ; contains L1:1 L1 repetitive element
2815	15367		1.02	4.0E-31	5730038	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
10427	22921	35924	0.65	4.0E-31	AF084464.1	NT	Homo sapiens chromosome 21 segment HS21C080
12008	24309		1.65	4.0E-31	AJ230125.1	NT	Homo sapiens SET domain and mariner transposase fusion gene (SETMAR) mRNA
12399	24559		1.51	4.0E-31	AB008681.1	NT	Rattus norvegicus GTP-binding protein REM2 (Rem2) mRNA, complete cds
7377	19903	32767	7.09	3.0E-31	4826853	NT	Homo sapiens GGT1 gene, exon 1
7505	20027	32891	1.92	3.0E-31	11420328	NT	Homo sapiens gene for activin receptor type IIB, complete cds
8102	20643		2.18	3.0E-31	AL163208.2	NT	Homo sapiens NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 8 (19kD, ASH1) (NDUF88) mRNA
9500	22000	34957	14.68	3.0E-31	D14523.1	NT	Homo sapiens hypothetical protein FLJ10842 (FLJ10842), mRNA
10488	22982	35990	0.64	3.0E-31	AA421242.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C006
10510	23048	36060	2.78	3.0E-31	P11174	SWISSPROT	Horse mRNA for ferritin L-chain, complete cds
11032	23546		6.94	3.0E-31	BF035327.1	EST_HUMAN	z06d04.t1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:731047 5'
1961	14545	27102	1.52	2.0E-31	AW838171.1	EST_HUMAN	40S RIBOSOMAL PROTEIN S15 (RIG PROTEIN)
							601458531F1 NIH_MGC_86 Homo sapiens cDNA clone IMAGE:3862086 5'
							QV2-L.T0051-260300-111-103 LT0051 Homo sapiens cDNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2255	14828	27405	1.16	2.0E-31	AI393388.1	EST_HUMAN	ig44g05.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2111672 3'
2379	14948	27522	2.08	2.0E-31	AL119245.1	EST_HUMAN	DKFZp781G1513_r1 761 (synonym: hamy2) Homo sapiens cDNA clone DKFZp781G1513 5'
2485	15050	27621	3.48	2.0E-31	AA458824.1	EST_HUMAN	aa8811.1 s1 Stratiogene fetal retina 937202 Homo sapiens cDNA clone IMAGE:838413 3' similar to contains THR 12 THR repetitive element ;
5479	18113	30522	0.81	2.0E-31	AW444496.1	EST_HUMAN	UJ-H-B13-akb-f-09-Q-U1 s1 NCI CGAP Sub5 Homo sapiens cDNA clone IMAGE:3146256 3' similar to contains MER29.b3
5888	18511	31237	2.97	2.0E-31	BE350127.1	EST_HUMAN	h09g01.x1 NCI CGAP_K1d13 Homo sapiens cDNA clone IMAGE:2733833 3'
9006	21543		2.32	2.0E-31	AA877784.1	EST_HUMAN	MER29 repetitive element ;
9134	21669	34611	3.65	2.0E-31	7661535	NT	MER37 TRANSPOSABLE ELEMENT, COMPLETE CONSENSUS SEQUENCE. ;
9820	22318	35301	1.04	2.0E-31	AV710948.1	EST_HUMAN	Homo sapiens B9 protein (B9), mRNA
9820	22318	35302	1.04	2.0E-31	AV710948.1	EST_HUMAN	AV710948 Cu Homo sapiens cDNA clone CuaALB07 5'
9887	22482	35467	1.73	2.0E-31	BE408611.1	EST_HUMAN	AV710948 Cu Homo sapiens cDNA clone CuaALB07 5'
9887	22482	35468	1.73	2.0E-31	BE408611.1	EST_HUMAN	601304125F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3638310 5'
11634	24268		3.08	2.0E-31	AF148512.1	NT	601304125F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3638310 5'
12078	25108		2.43	2.0E-31	AI114527.1	EST_HUMAN	Homo sapiens hexokinase II gene, promoter region
18	12697	25154	8.8	1.0E-31	U93163.1	NT	HA1110 Human fetal liver cDNA library Homo sapiens cDNA
1703	14296	26831	3.28	1.0E-31	O95371	SWISSPROT	Homo sapiens MAGE-B2 (MAGE-B2), MAGE-B3 (MAGE-B3), MAGE-B4 (MAGE-B4), and MAGE-B1 (MAGE-B1) genes, complete cds
1703	14296	26832	3.28	1.0E-31	O95371	SWISSPROT	OLFACTORY RECEPTOR 2C1
1703	14296	26833	3.28	1.0E-31	O95371	SWISSPROT	OLFACTORY RECEPTOR 2C1
4742	17323	29763	1.19	1.0E-31	AL134376.1	EST_HUMAN	OLFACTORY RECEPTOR 2C1
4742	17323	29764	1.19	1.0E-31	AL134376.1	EST_HUMAN	DKFZp547B235_r1 547 (synonym: hibr1) Homo sapiens cDNA clone DKFZp547B235 5'
5496	18130	30538	3.47	1.0E-31	AW391679.1	EST_HUMAN	DKFZp547B235_r1 547 (synonym: hibr1) Homo sapiens cDNA clone DKFZp547B235 5'
6282	18890	31658	1.84	1.0E-31	AF048727.1	NT	MIR3-ST0220-151299-028-e08_r1 ST0220 Homo sapiens cDNA
7332	19859	32722	0.84	1.0E-31	AF126145.1	NT	Homo sapiens minisatellite ccb1 repeat region
7772	20281	33178	0.68	1.0E-31	BE972818.1	EST_HUMAN	Bos taurus xenobiotic/medium-chain fatty acid:CoA ligase form XL-III mRNA, nuclear mRNA encoding mitochondrial protein, complete cds
10135	22630	35618	0.67	1.0E-31	U93163.1	NT	601852052F1 NIH_MGC_82 Homo sapiens cDNA clone IMAGE:3935293 5'
10786	23319	36329	2.94	1.0E-31	AI086434.1	EST_HUMAN	Homo sapiens MAGE-B2 (MAGE-B2), MAGE-B3 (MAGE-B3), MAGE-B4 (MAGE-B4), and MAGE-B1 (MAGE-B1) genes, complete cds
6749	18342	32149	2.29	9.0E-32	AV723976.1	EST_HUMAN	q121h03.x1 NCI CGAP_Brim25 Homo sapiens cDNA clone IMAGE:1750709 3' similar to TR:Q16595 Q16595 FRAXIN ;
7591	20106		1.07	9.0E-32	11430822	NT	AV723976 HTB Homo sapiens cDNA clone HTBAAG01 5'
							Homo sapiens hypothetical protein FLJ11294 (FLJ11294), mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2122	14700	27270	3.49	8.0E-32	AI056770.1	EST_HUMAN	oz15a09.x1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:1675384 3'
5673	18300	30781	0.9	8.0E-32	AW997214.1	EST_HUMAN	RC2-BN0048-200300-015-e04 BN0048 Homo sapiens cDNA
4985	17559	30002	3.69	7.0E-32	P52591	SWISSPROT	NUCLEAR ENVELOPE PORE MEMBRANE PROTEIN POM 121 (PORE MEMBRANE PROTEIN OF 121 KD) (P145)
11909	24247		3.42	7.0E-32	X17283.1	NT	Human chromosome 22 Immunoglobulin V(K) gene, part, with 5' breakpoint between orphion and neighbouring non-amplified region
2759	15314	27880	0.91	6.0E-32	AI478104.1	EST_HUMAN	hm34a10.x1 NCI CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2159894 3' similar to contains MER29.13
7402	19927		1.37	6.0E-32	BE88016.1	EST_HUMAN	MER29 repetitive element ;
12350	25088		1.51	6.0E-32	AA864653.1	EST_HUMAN	601511530F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3913087 5'
1072	13677	26187	75.63	5.0E-32	AF116827.1	NT	ch37c03.s1 NCI CGAP_Kid6 Homo sapiens cDNA clone IMAGE:1459872 3' similar to contains L1.13 L1 repetitive element ;
968	13577		1.55	4.0E-32	AL163246.2	NT	Homo sapiens PRO1181 mRNA, complete cds
7569	20112	32987	3.11	4.0E-32	11432574	NT	Homo sapiens chromosome 21 segment HS21C048
7569	20112	32988	3.11	4.0E-32	11432574	NT	Homo sapiens AT-binding transcription factor 1 (ATBF1), mRNA
8300	20841		0.77	4.0E-32	BE064410.1	EST_HUMAN	Homo sapiens AT-binding transcription factor 1 (ATBF1), mRNA
481	13114	25604	2.79	3.0E-32	Y17293.1	NT	RC4-BT0311-141199-011-h08 BT0311 Homo sapiens cDNA
1502	14094	28633	8.08	3.0E-32	AV731500.1	EST_HUMAN	Homo sapiens FLI-1 gene, partial
2933	15549	28025	0.73	3.0E-32	5174574	NT	AV731500 HTF Homo sapiens cDNA clone HTFAK07 5'
2933	15549	28026	0.73	3.0E-32	5174574	NT	Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (trithorax (Drosophila) homolog); translocated to, 4 (MLLT4) mRNA
9315	21829	34780	16.81	3.0E-32	AV758634.1	EST_HUMAN	Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (trithorax (Drosophila) homolog); translocated to, 4 (MLLT4) mRNA
9315	21829	34781	16.81	3.0E-32	AV758634.1	EST_HUMAN	AV758634 BM Homo sapiens cDNA clone BMFBFBH12 5'
10805	23328	36339	7.7	3.0E-32	AA777621.1	EST_HUMAN	AV758634 BM Homo sapiens cDNA clone BMFBFBH12 5'
11093	23605		1.63	3.0E-32	BF035327.1	EST_HUMAN	z05a07.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:448500 3' similar to contains THR13 THR repetitive element ;
11937	24270		6.37	3.0E-32	BE278086.1	EST_HUMAN	601458331F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3882086 5'
12325	15549	28025	6.26	3.0E-32	5174574	NT	601156285F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3139701 5'
12325	15549	28026	6.26	3.0E-32	5174574	NT	Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (trithorax (Drosophila) homolog); translocated to, 4 (MLLT4) mRNA
12491	24620		5.38	3.0E-32	BE278086.1	EST_HUMAN	Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (trithorax (Drosophila) homolog); translocated to, 4 (MLLT4) mRNA
5011	17584	30027	1.01	2.0E-32	BE296813.1	EST_HUMAN	Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (trithorax (Drosophila) homolog); translocated to, 4 (MLLT4) mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6400	18003	31781	0.9	2.0E-32	M35418.1	NT	Human cell 12-lipoxygenase mRNA, complete cds
6605	19202	32007	5.69	2.0E-32	Z38133.1	NT	H.sapiens mRNA for myosin
6605	19202	32008	5.69	2.0E-32	Z38133.1	NT	H.sapiens mRNA for myosin
8220	20761	33878	2.06	2.0E-32	AA114294.1	EST_HUMAN	zn66c08.11 Stralagene HeLa cell s3 937216 Homo sapiens cDNA clone IMAGE:563150 5'
8220	20761	33877	2.06	2.0E-32	AA114294.1	EST_HUMAN	zn66c08.11 Stralagene HeLa cell s3 937216 Homo sapiens cDNA clone IMAGE:563150 5'
12610	24694	30859	1.41	2.0E-32	AV736449.1	EST_HUMAN	AV736449 CB Homo sapiens cDNA clone CBFB/IA08 5'
12610	24694	30860	1.41	2.0E-32	AV736449.1	EST_HUMAN	AV736449 CB Homo sapiens cDNA clone CBFB/IA08 5'
7115	19455	32271	6.86	1.0E-32	11439789	NT	Homo sapiens chromosome 11 open reading frame 9 (C11ORF9), mRNA
8532	21071	33991	4.86	1.0E-32	AA720574.1	EST_HUMAN	hw21g02.s1 NCL_CGAP_GCBO Homo sapiens cDNA clone IMAGE:1241138 3' similar to contains THR.13 THR repetitive element
3527	16132		5.7	9.0E-33	BE327112.1	EST_HUMAN	hw07d05.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3182216 3' similar to TR:O88539 O88539 W/W DOMAIN BINDING PROTEIN 11.1
6552	19150		4.1	9.0E-33	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
8723	21262	34182	2.52	9.0E-33	BF347228.1	EST_HUMAN	602021164F1 NCL_CGAP_Brn67 Homo sapiens cDNA clone IMAGE:4156670 5'
10677	23208		6.39	9.0E-33	AL163280.2	NT	Homo sapiens chromosome 21 segment HS21C080
65	12744	25219	2.71	7.0E-33	5031736	NT	Homo sapiens short-chain alcohol dehydrogenase family member (HEP27) mRNA
65	12744	25220	2.71	7.0E-33	5031736	NT	Homo sapiens short-chain alcohol dehydrogenase family member (HEP27) mRNA
2206	14762	27355	1.92	7.0E-33	AI590115.1	EST_HUMAN	tot2b09.x1 NCL_CGAP_U12 Homo sapiens cDNA clone IMAGE:2178809 3' similar to contains OFR.11 OFR repetitive element
2675	15233		6.6	7.0E-33	AV730056.1	EST_HUMAN	AV730056 HTF Homo sapiens cDNA clone HTFAVE06 5'
3279	15890		15.76	7.0E-33	AW971307.1	EST_HUMAN	EST383396 MAGC resequences, MAGL Homo sapiens cDNA
8876	21415		1.06	7.0E-33	X54890.1	NT	Human hLRP mRNA for leukocyte common antigen-related peptide (protein-tyrosine phosphate) (EC 3.1.3.48)
10708	23236	36248	4.73	7.0E-33	BF347229.1	EST_HUMAN	602021164F1 NCL_CGAP_Brn67 Homo sapiens cDNA clone IMAGE:4156670 5'
11127	23635	36876	2.53	7.0E-33	AW971568.1	EST_HUMAN	EST383657 MAGC resequences, MAGL Homo sapiens cDNA
11815	24293	31009	7.43	7.0E-33	AA601416.1	EST_HUMAN	not16h01.s1 NCL_CGAP_Phe1 Homo sapiens cDNA clone IMAGE:1100881 3' similar to contains L.11 L1 repetitive element
3800	16400		0.78	6.0E-33	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
6217	18827	31599	1.11	6.0E-33	F30631.1	EST_HUMAN	HSPD21201 HM3 Homo sapiens cDNA clone s4000107H06
6217	18827	31600	1.11	6.0E-33	F30631.1	EST_HUMAN	HSPD21201-HM3 Homo sapiens cDNA clone s4000107H06
8515	21054	33877	7.9	6.0E-33	JD4038.1	NT	Human glyceraldehyde-3-phosphate dehydrogenase (GAPDH) gene, complete cds
8636	21175	34094	4.14	6.0E-33	11429198	NT	Homo sapiens similar to RAD23 (S. cerevisiae) homolog B (H. sapiens) (LOC63277), mRNA
9923	22419	35393	1.73	6.0E-33	6755609	NT	Mus musculus SRY-box containing gene 6 (Sox6), mRNA

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9923	22419	35394	1.73	6.0E-33	6755608	NT	Mus musculus SRY-box containing gene 6 (Sox6), mRNA
1814	14404		1.48	5.0E-33	BF373515.1	EST_HUMAN	QV1-FT0169-100700-271-a02 FT0169 Homo sapiens cDNA
1926	14510		1.2	5.0E-33	11141884	NT	Homo sapiens solute carrier family 5 (choline transporter), member 7 (SLC5A7), mRNA
1943	14527	27082	1.32	5.0E-33	4507208	NT	Homo sapiens spermidine synthase (SRM) mRNA
1943	14527	27083	1.32	5.0E-33	4507208	NT	Homo sapiens spermidine synthase (SRM) mRNA
4132	16724	29178	0.8	5.0E-33	AB014599.1	NT	Homo sapiens mRNA for KIAA0699 protein, partial cds
10147	22842	35632	0.76	5.0E-33	AW284679.1	EST_HUMAN	xq33f11.x1 NCI_CGAP_Lu28 Homo sapiens cDNA clone IMAGE:2752461.3'
10147	22842	35633	0.76	5.0E-33	AW284679.1	EST_HUMAN	xq33f11.x1 NCI_CGAP_Lu28 Homo sapiens cDNA clone IMAGE:2752461.3'
11720	24129		1.43	5.0E-33	11433063	NT	Homo sapiens ubiquitin protein ligase E3A (human papilloma virus E6-associated protein, Angelman syndrome) (UBE3A), mRNA
1167	13769		1.82	4.0E-33	AL163207.2	NT	Homo sapiens chromosome 21 segment HS21C007
2170	14747	27316	1.67	4.0E-33	4758987	NT	Homo sapiens RAB1, member RAS oncogene family (RAB1), mRNA
2464	15031		2.24	4.0E-33	AA626621.1	EST_HUMAN	ab51b11.1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone IMAGE:844317.5' similar to contains Alu repetitive element; contains MER28.b2 MER28 repetitive element;
2582	15145	27713	1.92	4.0E-33	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
4581	17164	29807	1.39	4.0E-33	AW293349.1	EST_HUMAN	U1-H-B12-ah1-c-03-0-U1.s1 NCI_CGAP_Sub4 Homo sapiens cDNA clone IMAGE:2727149.3'
5599	18229	30877	21.96	4.0E-33	AA053053.1	EST_HUMAN	z171a08.r1 Stratagene colon (#837204) Homo sapiens cDNA clone IMAGE:510038.5' similar to gb:X12671.maf1 HETEROGENEOUS NUCLEAR RIBONUCLEOPROTEIN A1 (HUMAN);
6526	19126	31919	0.76	4.0E-33	8393994	NT	Homo sapiens polymerase (DNA directed), alpha (POLA), mRNA
6526	19126	31920	0.76	4.0E-33	8393994	NT	Homo sapiens polymerase (DNA directed), alpha (POLA), mRNA
1128	13731		5.55	3.0E-33	BE350127.1	EST_HUMAN	h09q01.x1 NCI_CGAP_Kid13 Homo sapiens cDNA clone IMAGE:3146256.3' similar to contains MER28.b3
1128	13731		3.84	3.0E-33	BE350127.1	EST_HUMAN	MER29 repetitive element;
2493	15468		1.01	3.0E-33	AV647851.1	EST_HUMAN	MER29 repetitive element;
10336	22830	35824	1.19	3.0E-33	AA861510.1	EST_HUMAN	AV647851 GLC Homo sapiens cDNA clone GLBCF09.3'
19	12698		0.82	2.0E-33	AI160189.1	EST_HUMAN	Q13579 MARINER TRANSPOSASE.;
109	12698		2.24	2.0E-33	AI160189.1	EST_HUMAN	Q13579 MARINER TRANSPOSASE.;
1415	14008	26536	2.48	2.0E-33	AA010242.1	EST_HUMAN	q067g03.x1 Soares_fetal_heart_NbHH19W Homo sapiens cDNA clone IMAGE:1705204.3' similar to contains OFR.t1 OFR repetitive element;
1415	14008	26537	2.48	2.0E-33	AA010242.1	EST_HUMAN	q067g03.x1 Soares_fetal_heart_NbHH19W Homo sapiens cDNA clone IMAGE:1705204.3' similar to contains OFR.t1 OFR repetitive element;
4510	17094		4.41	2.0E-33	BE158039.1	EST_HUMAN	z108e08.r1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:430214.5'
							z108e08.r1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:430214.5'
							MR0-HT0405-160300-202-d08 HT0405 Homo sapiens cDNA

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Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5122	17694	30131	12.23	2.0E-33	AA626683.1	EST_HUMAN	ab51g11.r1 Strategene lung carcinoma 937218 Homo sapiens cDNA clone IMAGE:844386 5' similar to gb:X00734_cds1 TUBULIN BETA-5 CHAIN (HUMAN);
5255	17818	30242	1.93	2.0E-33	11421332	NT	Homo sapiens hypothetical protein SIRP-b2 (SIRP-b2), mRNA
5255	17818	30243	1.93	2.0E-33	11421332	NT	Homo sapiens hypothetical protein SIRP-b2 (SIRP-b2), mRNA
6555	19153	31949	1.5	2.0E-33	AI277492.1	EST_HUMAN	ql96d01.x1 Soares_NhHMPu_S1 Homo sapiens cDNA clone IMAGE:1880161 3'
9029	21566		2.63	2.0E-33	AI052256.1	EST_HUMAN	oz21d03.x1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:1675973 3' similar to gb:M29536 TRANSLATIONAL INITIATION FACTOR 2 BETA SUBUNIT (HUMAN);
10497	22891	36000	0.65	2.0E-33	11421332	NT	Homo sapiens hypothetical protein SIRP-b2 (SIRP-b2), mRNA
10497	22891	36001	0.65	2.0E-33	11421332	NT	Homo sapiens hypothetical protein SIRP-b2 (SIRP-b2), mRNA
10982	23496	36525	1.8	2.0E-33	AA453647.1	EST_HUMAN	zx48f05.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:795489 3' similar to TR:G1263081 G1263081 MARINER TRANSPOSASE. ;
9	12698		1.08	1.0E-33	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
7437	19961	32827	1.21	1.0E-33	MI3975.1	NT	Homo sapiens protein kinase C beta-II type (PRKCB1) mRNA, complete cds
9634	25126		0.62	1.0E-33	U09322.1	NT	Human dystrophin (DMD) gene, exons 7, 8 and 9, and partial cds
11202	23707	36759	2.63	1.0E-33	AW996818.1	EST_HUMAN	QV3-BN0047-230200-102-b03 BN0047 Homo sapiens cDNA
11515	23963	37033	5.83	1.0E-33	U09322.1	NT	Human dystrophin (DMD) gene, exons 7, 8 and 9, and partial cds
12214	24437		1.6	1.0E-33	AI927191.1	EST_HUMAN	wo88c06.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2462410 3'
12403	12698		2.81	1.0E-33	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
12434	24575	30913	2.55	1.0E-33	AV727809.1	EST_HUMAN	AV727809 HTC Homo sapiens cDNA clone HTCCNC12 5'
12628	24706		4.56	9.0E-34	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region, segment 172
1494	14086	26626	2.3	7.0E-34	T70845.1	EST_HUMAN	yd15e05.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:108320 5'
9911	14086	26626	0.66	7.0E-34	T70845.1	EST_HUMAN	yd15e05.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:108320 5'
11989	24299		1.75	7.0E-34	H12866.1	EST_HUMAN	Y14c10.r1 Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:148722 5'
498	13128	25616	1.61	6.0E-34	U10991.1	NT	Human G2 protein mRNA, partial cds
496	13128	25617	1.61	6.0E-34	U10991.1	NT	Human G2 protein mRNA, partial cds
11797	24177	31028	1.92	6.0E-34	U03686.1	NT	Mus musculus DAB/21 hair-specific (hcd-1) gene
1923	14508		2.5	5.0E-34	7706500	NT	Homo sapiens Npw38-binding protein NpwBP (LOC51728), mRNA
5218	17783	30201	5.85	5.0E-34	U30883.1	NT	Human splicing factor SRP55-1 (SRP55) mRNA, complete cds
8800	21339	34266	1.18	5.0E-34	AF078779.1	NT	Rattus norvegicus putative four repeat ion channel mRNA, complete cds
10534	23071	36084	2.26	5.0E-34	AB037856.1	NT	Homo sapiens mRNA for KIAA1435 protein, partial cds
11133	23641		1.9	5.0E-34	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
2041	14623	27192	3.42	4.0E-34	AB04667.1	EST_HUMAN	tt94c06.x1 NCI_CGAP_Pr28 Homo sapiens cDNA clone IMAGE:2249194 3'

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2745	15300	27866	1.06	4.0E-34	8922807	NT	Homo sapiens hypothetical protein FLJ10989 (FLJ10989), mRNA
8968	21506	34427	1.35	4.0E-34	BF209778.1	EST_HUMAN	601874950F1 NIH_MGC_54 Homo sapiens cDNA clone IMAGE:4102213 5'
6379	18983	31763	1.13	3.0E-34	M37277.1	NT	Human Ig germline H-chain D-region genes, partial cds
11031	23545		5.04	3.0E-34	BF035327.1	EST_HUMAN	601458531F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3862086 5'
8881	21419	34343	1.67	2.0E-34	AI678101.1	EST_HUMAN	wd35g06.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2330170 3' similar to contains MER29.12 MER29 repetitive element;
8881	21419	34344	1.67	2.0E-34	AI678101.1	EST_HUMAN	wd35g06.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2330170 3' similar to contains MER29.12 MER29 repetitive element;
1552	14144	26678	7.44	1.0E-34	P12236	SWISSPROT	ADP ATP CARRIER PROTEIN, LIVER ISOFORM T2 (ADP/ATP TRANSLOCASE 3) (ADENINE NUCLEOTIDE TRANSLOCATOR 3) (ANT 3)
3738	16337	28802	1.24	1.0E-34	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
4145	16737	29190	0.62	1.0E-34	AY006397.1	NT	Homo sapiens WNT3 precursor (WNT3) mRNA, complete cds
4145	16737	29191	0.62	1.0E-34	AY006397.1	NT	Homo sapiens WNT3 precursor (WNT3) mRNA, complete cds
4578	17161		8.22	1.0E-34	BE071414.1	EST_HUMAN	RC2-BT0506-240400-016-H08 BT0506 Homo sapiens cDNA
6287	18895	31664	2.69	1.0E-34	BE874052.1	EST_HUMAN	601484430F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3886969 5'
6287	18895	31665	2.69	1.0E-34	BE874052.1	EST_HUMAN	601484430F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3886969 5'
9613	22113	35076	17.45	1.0E-34	AL036635.1	EST_HUMAN	DKFZp564A1563_r1 564 (synonym: hibr2) Homo sapiens cDNA clone DKFZp564A1563 5'
11077	23589	36627	1.94	1.0E-34	11439599	NT	Homo sapiens nucleobindin 2 (NUCB2), mRNA
12176	25037		3.1	1.0E-34	AA807097.1	EST_HUMAN	oc31c11.s1 NCL_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1351316 3' similar to gb:X68203 TYROSINE-PROTEIN KINASE RECEPTOR FLT4 PRECURSOR (HUMAN);
12423	24808		4.62	1.0E-34	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
3707	16308	28776	1.45	9.0E-35	AW663302.1	EST_HUMAN	hh77b06.y1 NCL_CGAP_GU1 Homo sapiens cDNA clone IMAGE:2968787 5'
243	12902		10.67	8.0E-35	6031190	NT	Homo sapiens prohibitin (PHB) mRNA
1772	14362	26907	2.03	8.0E-35	BF589937.1	EST_HUMAN	naa33a08.x1 NCL_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3258134 3' similar to TR:O75912
1772	14362	26908	2.03	8.0E-35	BF589937.1	EST_HUMAN	naa33a08.x1 NCL_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3258134 3' similar to TR:O75912
4981	17565	30010	3.45	8.0E-35	BF183195.1	EST_HUMAN	O75912 DIACYLGLYCEROL KINASE IOTA;
10570	23105	36120	1.8	8.0E-35	BE378480.1	EST_HUMAN	601809588F1 NIH_MGC_18 Homo sapiens cDNA clone IMAGE:4040324 5'
11907	24245		2.96	8.0E-35	BF569282.1	EST_HUMAN	601236468F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3608513 5'
6810	19207	32015	2	7.0E-35	11425417	NT	602184624T1 NIH_MGC_42 Homo sapiens cDNA clone IMAGE:4300660 3'
1458	14050	26582	1.08	6.0E-35	AA757115.1	EST_HUMAN	Homo sapiens phosphatidylinositol glycan, class L (PIGL), mRNA
2010	14592	27152	1.29	6.0E-35	6005975	NT	an53h03.s1 Soares_testis_NHT Homo sapiens cDNA clone 1309397 3'
							Homo sapiens zinc finger protein 208 (ZNF208), mRNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4127	18719	28174	0.67	6.0E-35	AW297191.1	EST_HUMAN	UI-H-BWO-ajd-09-0-JL1.1 NCI_CGAP_Sub06 Homo sapiens cDNA clone IMAGE:2731433 3'
7838	20380	33285	3.41	6.0E-35	6005921	NT	Homo sapiens triple functional domain (PTPRF interacting) (TRIO), mRNA
8843	21182	34101	0.49	6.0E-35	X94232.1	NT	H. sapiens mRNA for novel T-cell activation protein
8843	21182	34102	0.49	6.0E-35	X94232.1	NT	H. sapiens mRNA for novel T-cell activation protein
9584	22084	35048	0.7	6.0E-35	AB002364.1	NT	Human mRNA for KIAA0366 gene, partial cds
9817	22315	35286	2.42	6.0E-35	AB037786.1	NT	Homo sapiens mRNA for KIAA1365 protein, partial cds
152	12815	25303	37.67	5.0E-35	AF154830.1	NT	Homo sapiens carbamyl phosphate synthetase I mRNA, complete cds
1747	14337	26883	1.28	5.0E-35	X63392.1	NT	H. sapiens Immunoglobulin kappa light chain variable region L14
3043	15659	28139	1.39	5.0E-35	6912639	NT	Homo sapiens Ring1 and YY1 binding protein (RYBP), mRNA
							Homo sapiens cdk2 kinase (CLK2), protein 1, cote1, glucocerebrosidase (GBA), and metadaxin genes, complete cds; metadaxin pseudogene and glucocerebrosidase pseudogene, and thrombospondin3 (THBS3) gene, partial cds
4489	17083	29533	1.81	5.0E-35	AF023268.1	NT	601431884F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3917229 5'
8125	20666		3.51	5.0E-35	BE980992.1	EST_HUMAN	qg38c05.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1837448 3' similar to SW:Y249_HUMAN Q92539 HYPOTHETICAL PROTEIN KIAA0249 ;
8151	20692	33606	2.29	5.0E-35	AI208765.1	EST_HUMAN	qg38c05.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1837448 3' similar to SW:Y249_HUMAN Q92539 HYPOTHETICAL PROTEIN KIAA0249 ;
8151	20692	33607	2.29	5.0E-35	AI208765.1	EST_HUMAN	qg38c05.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1837448 3' similar to SW:Y249_HUMAN Q92539 HYPOTHETICAL PROTEIN KIAA0249 ;
11058	23568		3.53	5.0E-35	AA001788.1	EST_HUMAN	zh84f12.r1 Soares_fetal_liver_spleen_INFLS_S1 Homo sapiens cDNA clone IMAGE:428015 5'
1481	14074	26613	13.95	4.0E-35	BE257907.1	EST_HUMAN	601109718F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3350405 5'
1855	14443	26999	4.12	4.0E-35	H91193.1	EST_HUMAN	yu68a07.r1 Soares_fetal_liver_spleen_INFLS Homo sapiens cDNA clone IMAGE:241238 5' similar to contains P.TR5 repetitive element ;
4927	17502		0.58	4.0E-35	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
7260	19788		2.08	4.0E-35	BE350127.1	EST_HUMAN	ht09g01.x1 NCI_CGAP_Kid13 Homo sapiens cDNA clone IMAGE:3146256 3' similar to contains MER28 b3
8455	20995	33913	6.88	4.0E-35	AL046596.1	EST_HUMAN	MER29 repetitive element ;
1623	14216	26748	31.49	3.0E-35	BE268182.1	EST_HUMAN	DKFZp434L148_r1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434L148 5'
2368	14840		2.22	3.0E-35	AF224492.1	NT	601125280F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3345083 5'
5543	18175	30569	22.73	3.0E-35	BF433100.1	EST_HUMAN	Homo sapiens phospholipid scramblase 1 gene, complete cds
5543	18175	30590	22.73	3.0E-35	BF433100.1	EST_HUMAN	7n25a09.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3565381 3' similar to TR:Q8QZH7
9409	21918		1.72	3.0E-35	AF223391.1	NT	Q8QZH7 F-BOX PROTEIN FBL2 ;
							7n25a09.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3565361 3' similar to TR:Q8QZH7
							Q8QZH7 F-BOX PROTEIN FBL2 ;
							Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced

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Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10078	22573	35568	0.8	3.0E-35	AW003063.1	EST_HUMAN	wr03a05.x1 NCL_CGAP_GC6 Homo sapiens cDNA clone IMAGE:2480432 3' similar to SW:POL1_HUMAN P10260 RETROVIRUS-RELATED POL POLYPROTEIN [CONTAINS: REVERSE TRANSCRIPTASE ; K6932F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA clone K6932 5' similar to REPETITIVE ELEMENT
113	15407	25269	1.18	2.0E-35	N88965.1	EST_HUMAN	A971F Heart Homo sapiens cDNA clone A971
1230	13828	26344	1.13	2.0E-35	T11909.1	EST_HUMAN	Homo sapiens mRNA for Gab2, complete cds
2259	14833	27411	4.88	2.0E-35	AB018413.1	NT	Homo sapiens Grb2-associated binder 2 (KIAA0571), mRNA
3353	15961	28437	0.79	2.0E-35	6912459	NT	Homo sapiens Grb2-associated binder 2 (KIAA0571), mRNA
3353	15961	28438	0.79	2.0E-35	6912459	NT	Homo sapiens mRNA for KIAA0895 protein, partial cds
3613	16216		0.85	2.0E-35	AB020702.1	NT	TCBAP2E4328 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP4328
3981	16579	28049	0.86	2.0E-35	BE247575.1	EST_HUMAN	TCBAP2E4328 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP4328
3981	16579	28050	0.86	2.0E-35	BE247575.1	EST_HUMAN	TCBAP2E4328 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP4328
4777	17358		2.99	2.0E-35	H49239.1	EST_HUMAN	yc19a12.1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:274079 5'
5770	18396	31110	1.48	2.0E-35	BF332417.1	EST_HUMAN	QV0-BT0701-210400-199-504 BT0701 Homo sapiens cDNA H.sapiens PROS-27 mRNA
10675	23207	36219	4.14	2.0E-35	X59417.1	NT	Homo sapiens Grb2-associated binder 2 (KIAA0571), mRNA
11663	15961	28437	1.34	2.0E-35	6912459	NT	Homo sapiens Grb2-associated binder 2 (KIAA0571), mRNA
11663	15961	28438	1.34	2.0E-35	6912459	NT	Homo sapiens Grb2-associated binder 2 (KIAA0571), mRNA
12405	24563		42.99	2.0E-35	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
12525	15407	25269	1.4	2.0E-35	N88965.1	EST_HUMAN	K6932F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA clone K6932 5' similar to REPETITIVE ELEMENT
50	12730	25194	5.95	1.0E-35	AA631949.1	EST_HUMAN	frmc16 Regional genomic DNA specific cDNA library Homo sapiens cDNA clone CR12-1
50	12730	25195	5.95	1.0E-35	AA631949.1	EST_HUMAN	frmc16 Regional genomic DNA specific cDNA library Homo sapiens cDNA clone CR12-1
782	13401	25903	55.23	1.0E-35	AW389473.1	EST_HUMAN	IL2-ST0162-131099-008-412 ST0162 Homo sapiens cDNA
782	13401	25904	55.23	1.0E-35	AW389473.1	EST_HUMAN	IL2-ST0162-131099-008-412 ST0162 Homo sapiens cDNA
942	13555		1.15	1.0E-35	T87947.1	EST_HUMAN	y493a01.1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:115752 5' similar to SP:A44282 A44282 RETROVIRUS-RELATED POL POLYPROTEIN - HUMAN ;
2579	15141	27710	1.98	1.0E-35	7705994	NT	Homo sapiens hypothetical protein (LOC51233), mRNA
2795	15348	27917	1.36	1.0E-35	BE350127.1	EST_HUMAN	h09g01.x1 NCL_CGAP_Kid13 Homo sapiens cDNA clone IMAGE:3146256 3' similar to contains MER29 b3 MER29 repetitive element ;
2795	15348	27918	1.36	1.0E-35	BE350127.1	EST_HUMAN	h09g01.x1 NCL_CGAP_Kid13 Homo sapiens cDNA clone IMAGE:3146256 3' similar to contains MER29 b3 MER29 repetitive element ;
3177	15790	28282	1.03	1.0E-35	6006030	NT	Homo sapiens transcription elongation factor B (SIII), polypeptide 1-like (TCEB1L) mRNA

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Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3199	15811	28284	1.52	1.0E-35	AV650422.1	EST_HUMAN	AV650422 GLC Homo sapiens cDNA clone GLCCEFO6 3'
3199	15811	28285	1.52	1.0E-35	AV650422.1	EST_HUMAN	AV650422 GLC Homo sapiens cDNA clone GLCCEFO6 3'
4513	17097	29543	5.19	1.0E-35	7656905	NT	Mus musculus activin receptor interacting protein 1 (Arip1-pending), mRNA
4513	17097	29544	5.19	1.0E-35	7656905	NT	Mus musculus activin receptor interacting protein 1 (Arip1-pending), mRNA
5701	18327	30831	1.31	1.0E-35	11526236	NT	Homo sapiens chromatin assembly factor 1, subunit B (p60) (CHAF1B), mRNA
7069	18098	30444	0.73	1.0E-35	AW808665.1	EST_HUMAN	MR1-ST0111-111199-011-d07 ST0111 Homo sapiens cDNA
7069	18098	30445	0.73	1.0E-35	AW808665.1	EST_HUMAN	MR1-ST0111-111199-011-d07 ST0111 Homo sapiens cDNA
7496	20019	32883	0.8	1.0E-35	AB033105.1	NT	Homo sapiens mRNA for KIAA1279 protein, partial cds
7637	20149	33033	0.88	1.0E-35	11418002	NT	Homo sapiens KIAA0645 gene product (KIAA0645), mRNA
9461	24794	34941	3.33	1.0E-35	AU158595.1	EST_HUMAN	AU158595 PLACE3 Homo sapiens cDNA clone PLACE3000382 3'
9461	24794	34942	3.33	1.0E-35	AU158595.1	EST_HUMAN	AU158595 PLACE3 Homo sapiens cDNA clone PLACE3000382 3'
10470	22864	35974	0.57	1.0E-35	BF589594.1	EST_HUMAN	nao06406.x1 NCL CGAP_Pr28 Homo sapiens cDNA clone IMAGE:3254051 3' similar to TR:O31341
10470	22864	35975	0.57	1.0E-35	BF589594.1	EST_HUMAN	nao06406.x1 NCL CGAP_Pr28 Homo sapiens cDNA clone IMAGE:3254051 3' similar to TR:O31341
11601	24044		4.48	1.0E-35	A1525119.1	EST_HUMAN	O31341 BETA-GALACTOSIDASE ;
11695	24996		1.3	1.0E-35	11418274	NT	O31341 BETA-GALACTOSIDASE ;
12287	24489		1.87	1.0E-35	BE792832.1	EST_HUMAN	promtne-7.D01.r btumor Homo sapiens cDNA 5'
9156	21691	34635	0.51	8.0E-36	AA348480.1	EST_HUMAN	Homo sapiens fibulin 1 (FBLN1), mRNA
10060	22555		2.13	8.0E-36	7706259	NT	601584833F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3638985 5'
2957	15573	28050	1.15	7.0E-36	AW857579.1	EST_HUMAN	EST54938 Hippocampus II Homo sapiens cDNA 5' end similar to similar to endogenous retrovirus 9, 5' LTR
3152	15766		5.38	7.0E-36	4557498	NT	Homo sapiens CGI-08 protein (LOC51805), mRNA
7650	20162	33049	6.73	7.0E-36	U06672.1	NT	CM1-CT0315-091289-063-d07 CT0315 Homo sapiens cDNA
7650	20162	33050	6.73	7.0E-36	U06672.1	NT	Homo sapiens C-terminal binding protein 2 (CTBP2) mRNA
12070	24350	30965	5.15	7.0E-36	AF052051.1	NT	Human carcinoembryonic antigen gene family member 12 (CGM12) gene, exons L and LN
2048	14630	27169	2.5	6.0E-36	7706622	NT	Human carcinoembryonic antigen gene family member 12 (CGM12) gene, exons L and LN
2461	15028		5.35	6.0E-36	AB035346.1	NT	Homo sapiens glutathione transferase A4 gene, exon 1
3701	16302	28770	0.98	6.0E-36	BF515101.1	EST_HUMAN	Homo sapiens ninjurin 2 (NINJ2), mRNA
5534	18166	30580	9.75	6.0E-36	A1435169.1	EST_HUMAN	Homo sapiens TGL6 gene, exon 12
7163	19695	32541	3.97	6.0E-36	AW780143.1	EST_HUMAN	U1-H-BW1-antv-c-12-0-U1.s1 NCL CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3083542 3'
8586	21125	34045	2.54	6.0E-36	AF208161.1	NT	th93b06.x1 Soares_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:2126195 3' similar to gb:M11949 PANCREATIC SECRETORY TRYPSIN INHIBITOR PRECURSOR (HUMAN);
							th006h02.x1 NCL CGAP_Cot14 Homo sapiens cDNA clone IMAGE:3036627 3' similar to SW:IMA2_HUMAN
							P52292 IMPORTIN ALPHA-2 SUBUNIT ;
							Homo sapiens syncytin precursor, mRNA, complete cds

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10125	22620		0.54	6.0E-36	C16927.1	EST_HUMAN	C16927 Clontech human aorta polyA+ mRNA (#6572) Homo sapiens cDNA clone GEN-535C11 5'
11422	23873	36936	2.62	6.0E-36	AI380499.1	EST_HUMAN	H95c09.x1 NCI_CGAP_CLL1 Homo sapiens cDNA clone IMAGE:2107024 3' similar to contains MER9 b2 MER9 repetitive element ;
143	12808	25296	12.3	5.0E-36	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
2779	15332	27901	15.02	5.0E-36	BE388436.1	EST_HUMAN	601285567F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3607289 5'
3672	16273	28739	1.07	5.0E-36	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
4903	17478	29935	1.6	5.0E-36	5729729	NT	Homo sapiens API5-like 1 (API5L1), mRNA
4903	17478	29936	1.6	5.0E-36	5729729	NT	Homo sapiens API5-like 1 (API5L1), mRNA
11661	12808	25296	4.05	5.0E-36	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
11663	24285	31024	2.88	5.0E-36	11417862	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
1267	13864	26381	2.14	4.0E-36	BE010038.1	EST_HUMAN	PM3-BN0178-100400-001-g04 BN0178 Homo sapiens cDNA RETROVIRUS-RELATED POLYPROTEIN [CONTAINS: REVERSE TRANSCRIPTASE ; ENDONUCLEASE]
1491	14083	26624	1.88	4.0E-36	P10286	SWISSPROT	
1687	14279	26813	1.35	4.0E-36	BE382574.1	EST_HUMAN	601288574F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3628386 5'
2264	14838		1.7	4.0E-36	AW247772.1	EST_HUMAN	2820020: SpHme NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2820020 5'
3397	16005	28486	0.83	4.0E-36	BE389289.1	EST_HUMAN	601282266F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3604168 5'
3397	16005	28487	0.83	4.0E-36	BE389289.1	EST_HUMAN	601282266F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3604168 5'
4866	17442	29883	0.57	4.0E-36	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
5310	17872	30294	0.58	4.0E-36	AA605361.1	EST_HUMAN	ok05b11.s1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1506809 3' similar to SW:D3HL_RAT_P29266 3-HYDROXYISOBUTYRATE DEHYDROGENASE PRECURSOR ;
5892	18515		0.94	4.0E-36	R64023.1	EST_HUMAN	y19f05.r1 Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:139713 5'
6205	18815	31586	2.19	4.0E-36	11497041	NT	Homo sapiens a disintegrin and metalloproteinase domain 22 (ADAM22), transcript variant 3, mRNA
7649	20161	33048	1.77	4.0E-36	M33320.1	NT	Human platelet Glycoprotein IIb (GPIIb) gene, exons 2-29
8490	21028	33947	1.15	4.0E-36	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
8490	21029	33948	1.15	4.0E-36	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
10867	23388	36403	2.36	4.0E-36	AA400370.1	EST_HUMAN	zu69c10.r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:743250 5'
11981	24292		1.46	4.0E-36	11420516	NT	Homo sapiens nuclear factor of activated T-cells, cytoplasmic 2 (NFATC2), mRNA
12026	24872		6.32	4.0E-36	AV753629.1	EST_HUMAN	AV753629 TP Homo sapiens cDNA clone TFGABH01 5'
725	13345	25837	2.82	3.0E-36	AF098810.1	NT	Homo sapiens neuritin III-alpha gene, partial cds
1545	14137	26671	1.01	3.0E-36	AF110239.1	NT	Homo sapiens calcium/calmodulin-stimulated cyclic nucleotide phosphodiesterase (PDE1A) gene, partial cds
1545	14137	26672	1.01	3.0E-36	AF110239.1	NT	Homo sapiens calcium/calmodulin-stimulated cyclic nucleotide phosphodiesterase (PDE1A) gene, partial cds
2338	14809	27481	0.88	3.0E-36	766240.1	NT	Homo sapiens KIAA0952 protein (KIAA0952), mRNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4600	17184	29631	7.36	3.0E-38	10181139	NT	Mus musculus junctophilin 1 (Jp1-pending), mRNA
10885	23489	36529	2.08	3.0E-38	BF035327.1	EST_HUMAN	601458531F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3862086 5'
3204	15816	28262	3.78	2.0E-36	BE269287.1	EST_HUMAN	601106343F1 NIH_MGC_18 Homo sapiens cDNA clone IMAGE:3342706 5'
5094	17667	30108	9.22	2.0E-36	AW880376.1	EST_HUMAN	QV0-OT0030-240300-174-h04 OT0030 Homo sapiens cDNA
5877	18304	30786	2.55	2.0E-36	AF267747.1	NT	Mus musculus p47-phox gene, complete cds
6012	18632	31367	4.22	2.0E-36	T08756.1	EST_HUMAN	EST06648 Infant Brain, Banto Soares Homo sapiens cDNA clone HIBB428 5' end
6680	19286	32089	12.01	2.0E-36	T69629.1	EST_HUMAN	yc44a07.r1 Stragene liver (#937224) Homo sapiens cDNA clone IMAGE:83508 5'
9310	21824	34772	0.96	2.0E-36	BF512784.1	EST_HUMAN	UHH-BW1-annu-a-11-0-UI-s1 NCI_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3071132 3'
9468	21887	34817	0.6	2.0E-36	4507848	NT	Homo sapiens ubiquitin specific protease 13 (isopeptidase T-3) (USP13) mRNA
9468	21867	34818	0.6	2.0E-36	4507848	NT	Homo sapiens ubiquitin specific protease 13 (isopeptidase T-3) (USP13) mRNA
918	13531	26049	2.35	1.0E-38	BE409310.1	EST_HUMAN	601300938F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3635480 5'
2190	14768	27337	0.91	1.0E-36	BE146523.1	EST_HUMAN	RC1-HT0217-131199-021-h07 HT0217 Homo sapiens cDNA
2190	14766	27338	0.91	1.0E-36	BE146523.1	EST_HUMAN	RC1-HT0217-131199-021-h07 HT0217 Homo sapiens cDNA
2243	14818	27392	1.34	1.0E-36	BF673761.1	EST_HUMAN	602136493F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4272886 5'
2538	15102		1.75	1.0E-36	AW276898.1	EST_HUMAN	xp57806.x1 NCI_CGAP_Ov39 Homo sapiens cDNA clone IMAGE:2744434 3' similar to WP:C13F10.7
3388	15997		1.23	1.0E-36	AF156962.1	NT	CE08148 ;
5904	18526	31252	0.86	1.0E-36	AL044446.1	EST_HUMAN	Homo sapiens human endogenous retrovirus W proC8-19 protease (pro) gene, partial cds
6059	18878	31418	0.97	1.0E-36	4827064	NT	DKFZp434G022_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434G022 5'
6330	18936		3.97	1.0E-36	AI867714.1	EST_HUMAN	Homo sapiens zinc finger protein 147 (estrogen-responsive finger protein) (ZNF147) mRNA
6524	19124	31916	1.13	1.0E-36	R25012.1	EST_HUMAN	wb37c12.x1 NCI_CGAP_G06 Homo sapiens cDNA clone IMAGE:2307862 3' similar to contains Alu repetitive element
6524	19124	31917	1.13	1.0E-36	R25012.1	EST_HUMAN	y936g10.r1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:34529 5' similar to SP:CAHP_HUMAN P35219 CARBONIC ANHYDRASE-RELATED PROTEIN ;
6783	19374	32190	0.7	1.0E-36	AL120542.1	EST_HUMAN	y936g10.r1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:34529 5' similar to SP:CAHP_HUMAN P35219 CARBONIC ANHYDRASE-RELATED PROTEIN ;
7801	20443	33347	3.18	1.0E-36	AA148034.1	EST_HUMAN	DKFZp761A229_r1 761 (synonym: hamy2) Homo sapiens cDNA clone DKFZp761A229 5'
7801	20443	33348	3.18	1.0E-36	AA148034.1	EST_HUMAN	zo51a12.r1 Stragene endothelial cell 937223 Homo sapiens cDNA clone IMAGE:590398 5'
7967	20539	33441	1.22	1.0E-36	AA420467.1	EST_HUMAN	zo51a12.r1 Stragene endothelial cell 937223 Homo sapiens cDNA clone IMAGE:590398 5'
7967	20539	33442	1.22	1.0E-36	AA420467.1	EST_HUMAN	nc60608.r1 NCI_CGAP_P71 Homo sapiens cDNA clone IMAGE:745670
8120	20661	33570	0.73	1.0E-36	AU141688.1	EST_HUMAN	nc60608.r1 NCI_CGAP_P71 Homo sapiens cDNA clone IMAGE:745670
8120	20661	33571	0.73	1.0E-36	AU141688.1	EST_HUMAN	AU141688 THYRO1 Homo sapiens cDNA clone THYRO1001033 5'
8959	21497	34420	2.86	1.0E-36	AW103658.1	EST_HUMAN	AU141688 THYRO1 Homo sapiens cDNA clone THYRO1001033 5'
10023	22518	35513	3.89	1.0E-36	BF364169.1	EST_HUMAN	xe82b07.x1 NCI_CGAP_Bm35 Homo sapiens cDNA clone IMAGE:2614357 3'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10231	22726	35717	0.71	1.0E-36	AW855988.1	EST_HUMAN	RC3-CT0279-040500-017-a10 CT0279 Homo sapiens cDNA
10231	22726	35718	0.71	1.0E-36	AW855988.1	EST_HUMAN	RC3-CT0279-040500-017-a10 CT0279 Homo sapiens cDNA
10828	23347	36363	3.55	1.0E-36	AW897636.1	EST_HUMAN	OM3-NN0061-140400-147-h12 NN0061 Homo sapiens cDNA
11258	23788	36844	4.94	1.0E-36	AW504143.1	EST_HUMAN	UI-HF-BNO-ale-c-03-0-UI.r1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3079277 5'
11848	24208		6.11	1.0E-36	11418177	NT	Homo sapiens Ran GTPase activating protein 1 (RANGAP1), mRNA
12316	24507		6.19	1.0E-36	AL163213.2	NT	Homo sapiens chromosome 21 segment HS21C013
12592	24683		3.59	1.0E-36	AF202723.1	NT	Homo sapiens Sad1 unc-84 domain protein 2 (SUN2) mRNA, partial cds
7415	19940	32804	1.94	9.0E-37	AW009277.1	EST_HUMAN	w850507.x1 NCI_CGAP_C63 Homo sapiens cDNA clone IMAGE:2504245 3'
7415	19940	32805	1.94	9.0E-37	AW009277.1	EST_HUMAN	w850507.x1 NCI_CGAP_C63 Homo sapiens cDNA clone IMAGE:2504245 3'
12113	24374		1.63	9.0E-37	W22618.1	EST_HUMAN	73D4 Human retina cDNA Tsp5091-cleaved sublibrary Homo sapiens cDNA not directional
3398	16006	28488	1.01	8.0E-37	4757976	NT	Homo sapiens chimerin (chimerin) 2 (CHN2) mRNA
5458	18091		1.58	8.0E-37	BE698077.1	EST_HUMAN	CM0-UT0003-050800-503-409 UT0003 Homo sapiens cDNA
5994	18614	31348	4.02	8.0E-37	BE350127.1	EST_HUMAN	ht09g01.x1 NCI_CGAP_Kid13 Homo sapiens cDNA clone IMAGE:3146256 3' similar to contains MER29.b3
5994	18614	31349	4.02	8.0E-37	BE350127.1	EST_HUMAN	MER29 repetitive element ;
6037	18656	31398	6.7	8.0E-37	AW840840.1	EST_HUMAN	ht09g01.x1 NCI_CGAP_Kid13 Homo sapiens cDNA clone IMAGE:3146256 3' similar to contains MER29.b3
7825	20367	33275	6.31	8.0E-37	X87344.1	NT	H.sapiens DMA, DMB, HLA-Z1, IPP2, LMP2, TAP1, LMP7, TAP2, DOB, DQB2 and RING8, 9, 13 and 14 genes
1328	13922		2.3	7.0E-37	AL042800.1	EST_HUMAN	DKFZp434E0422_r1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434E0422 5'
1780	14370	26914	1.55	7.0E-37	AF111167.2	NT	Homo sapiens jun dimerization protein gene, partial cds, complete cds, and unknown gene
1780	14370	26915	1.55	7.0E-37	AF111167.2	NT	Homo sapiens jun dimerization protein gene, partial cds; cfos gene, complete cds; and unknown gene
10637	23188	36180	7.76	7.0E-37	AI817700.1	EST_HUMAN	wk25b11.x1 NCI_CGAP_Brn25 Homo sapiens cDNA clone IMAGE:2413341 3' similar to contains PTR5.12
10774	23298	36303	3.74	7.0E-37	AI536702.1	EST_HUMAN	trn87g03.x1 NCI_CGAP_Brn25 Homo sapiens cDNA clone IMAGE:2165140 3' similar to contains L1.b3 L1 repetitive element ;
5304	17868		2.5	6.0E-37	R10039.1	EST_HUMAN	y25a02.r1 Soares fetal liver spleen 1NLS Homo sapiens cDNA clone IMAGE:127850 5'
8377	20917	33837	0.54	6.0E-37	AF169889.1	NT	Homo sapiens protocadherin alpha 10 alternate isoform (PCDH-alpha10) mRNA, complete cds
12455	24588		3.85	6.0E-37	AF202723.1	NT	Homo sapiens Sad1 unc-84 domain protein 2 (SUN2) mRNA, partial cds
6243	18852	31622	4.92	5.0E-37	AA307123.1	EST_HUMAN	EST178035 Colon carcinoma (HCC) cell line Homo sapiens cDNA 5' end
6243	18852	31623	4.92	5.0E-37	AA307123.1	EST_HUMAN	EST178035 Colon carcinoma (HCC) cell line Homo sapiens cDNA 5' end
8691	21230	34150	0.85	5.0E-37	AV750211.1	EST_HUMAN	AV750211 NPC Homo sapiens cDNA clone NPCBGH09 5'

Table 4

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10800	23323		4.94	5.0E-37	7857117	NT	Homo sapiens glycine C-acetyltransferase (2-amino-3-ketobutyrate-CoA ligase) (GCAT), mRNA
11843	24205		5.21	5.0E-37	AF149773.1	NT	Homo sapiens NOD1 protein (NOD1) gene, exons 1, 2, and 3
2468	15035	27602	1.7	4.0E-37	AA70794.1	EST_HUMAN	280604.s1 Soares_fetal_liver_spleen_1NFLS_ST Homo sapiens cDNA clone IMAGE:448015 3'
9278	21804	34755	0.68	4.0E-37	AA843806.1	EST_HUMAN	ek09e02.s1 Soares_parathyroid_tumor_NbHFA Homo sapiens cDNA clone IMAGE:1405442 3'
10912	23431	36451	1.74	4.0E-37	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
10912	23431	36452	1.74	4.0E-37	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
2061	14641	27215	2.58	3.0E-37	AL048956.1	EST_HUMAN	DKFZp434L2418_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434L2418
2061	14641	27216	2.58	3.0E-37	AL048956.1	EST_HUMAN	DKFZp434L2418_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434L2418
2892	15608		3.5	3.0E-37	AW061150.1	EST_HUMAN	EST373222 MAGE resequencing, MAGF Homo sapiens cDNA
5126	17688		0.78	3.0E-37	BF035327.1	EST_HUMAN	601458531F1 NIH_MGC 66 Homo sapiens cDNA clone IMAGE:3862086 5'
							at34c05.x1 Barstead colon HPLRB7 Homo sapiens cDNA clone IMAGE:2373896 3' similar to TR:Q13537
7557	20075	32951	0.79	3.0E-37	AU749952.1	EST_HUMAN	Q13537 SIMILAR TO POGO ELEMENT ;
404	13079	25571	0.9	2.0E-37	D88790.1	NT	Homo sapiens mRNA for AML1, complete cds
404	13079	25572	0.9	2.0E-37	D88790.1	NT	Homo sapiens mRNA for AML1, complete cds
1119	13722	26234	2.1	2.0E-37	AU131202.1	EST_HUMAN	AU131202 NT2RP3 Homo sapiens cDNA clone NT2RP3002166 5'
1119	13722	26235	2.1	2.0E-37	AU131202.1	EST_HUMAN	AU131202 NT2RP3 Homo sapiens cDNA clone NT2RP3002166 5'
2006	14588	27148	1.45	2.0E-37	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047
							Homo sapiens cytochrome P450, subfamily XXVIA (steroid 27-hydroxylase, cerebrotendinous xanthomatosis), polypeptide 1 (CYP27A1b) mRNA
3962	16560	28028	6.99	2.0E-37	4503210	NT	Homo sapiens DEADH (Asp-Glu-Ala-Asp/His) box polypeptide 1 (DDX1) mRNA
4330	16917	29360	0.59	2.0E-37	4826885	NT	EST52931 Fetal heart II Homo sapiens cDNA 5' and
6765	19358	32167	3.94	2.0E-37	AA346720.1	EST_HUMAN	EST52931 Fetal heart II Homo sapiens cDNA 5' and
7938	20480	33390	0.53	2.0E-37	BE537764.1	EST_HUMAN	601067534F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3453657 5'
7938	20480	33391	0.53	2.0E-37	BE537764.1	EST_HUMAN	601067534F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3453657 5'
7981	20523	33429	2.75	2.0E-37	BF204032.1	EST_HUMAN	601869157F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4111406 5'
11434	23884	36951	19.39	2.0E-37	AF176013.1	NT	Homo sapiens J domain containing protein 1 isoform b (JDP1) mRNA, complete cds
12833	24710		5.1	2.0E-37	11417872	NT	Homo sapiens pscadillo (zebrafish) homolog 1, containing BRCT domain (PES1), mRNA
2135	14713	27286	2.49	1.0E-37	AL163281.2	NT	Homo sapiens chromosome 21 segment HS21C081
3231	15843		0.98	1.0E-37	AW862082.1	EST_HUMAN	RC3-CT0347-210400-016-h03 CT0347 Homo sapiens cDNA
4243	16831	29282	0.96	1.0E-37	BE872365.1	EST_HUMAN	601448619F1 NIH_MGC 65 Homo sapiens cDNA clone IMAGE:3852652 5'
5075	17648	30089	3.67	1.0E-37	BF371719.1	EST_HUMAN	QV0-FN0180-280700-318-c10 FN0180 Homo sapiens cDNA
6155	18768		0.8	1.0E-37	7305360	NT	Mus musculus otogelin (Otog), mRNA
8156	20697	33610	0.94	1.0E-37	BE546032.1	EST_HUMAN	601072419F1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3458308 5'
							zp21b02.r1 Stratagene neuroepithelium (#837231) Homo sapiens cDNA clone IMAGE:810059 5' similar to contains L1:12 L1 repetitive element ;
8670	21209	34127	3.03	1.0E-37	AA171406.1	EST_HUMAN	

Table 4

Single Exon Probes Expressed In Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10577	23112	36125	5.51	1.0E-37	M22878.1	NT	Human somatic cytochrome c (HC1) processed pseudogene, complete cds
12167	24408		3.8	1.0E-37	BE771814.1	EST_HUMAN	CM3-FT0098-140700-243-d07 FT0098 Homo sapiens cDNA
5950	18571	31303	1.71	9.0E-38	10048482	NT	Rattus norvegicus multidomain presynaptic cytomatrix protein Piccolo (LOC56768), mRNA
1264	13881	26378	2.05	8.0E-38	11436855	NT	Homo sapiens Grb2-associated binder 2 (KIAA0571), mRNA
2543	15107	27680	1.49	8.0E-38	BF346221.1	EST_HUMAN	602018401F1 NCL_CGAP_Brn67 Homo sapiens cDNA clone IMAGE:4153992 5'
12231	13881	26378	1.62	8.0E-38	11436955	NT	Homo sapiens Grb2-associated binder 2 (KIAA0571), mRNA
4307	16893	29336	0.63	7.0E-38	H10092.1	EST_HUMAN	yn5107.r1 Soares adult brain N265HB55Y Homo sapiens cDNA clone IMAGE:171973 5'
3078	15693	28167	2.75	6.0E-38	BF033033.1	EST_HUMAN	601455722F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3859348 5'
5776	18401	31116	1.34	6.0E-38	11425114	NT	Homo sapiens zinc finger protein ZNF287 (ZNF287), mRNA
5776	18401	31117	1.34	6.0E-38	11425114	NT	Homo sapiens zinc finger protein ZNF287 (ZNF287), mRNA
11896	24110		10.47	6.0E-38	11435947	NT	Homo sapiens chromosome 12 open reading frame 3 (C12ORF3), mRNA
12201	24427	30952	14.11	6.0E-38	AB002059.1	NT	Homo sapiens DNA for Human P2XM, complete cds
12614	24837	30797	1.7	6.0E-38	11418164	NT	Homo sapiens adenylosuccinate lyase (ADSL), mRNA
758	13375	25870	1.28	5.0E-38	AW971819.1	EST_HUMAN	EST383908 MAGE resequences, MAGL Homo sapiens cDNA
2495	15059	27633	1.94	5.0E-38	AJ237740.1	NT	Homo sapiens RIBIR gene (partial), exon 8
7096	19687	32508	2.15	5.0E-38	BE971610.1	EST_HUMAN	601450748F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3854074 5'
124	12793	25277	3.63	4.0E-38	Z25466.1	NT	B.taurus mitochondrial aspartate aminotransferase mRNA, complete CDS
124	12793	25278	3.63	4.0E-38	Z25466.1	NT	B.taurus mitochondrial aspartate aminotransferase mRNA, complete CDS
1199	13800	26312	1.06	3.0E-38	11435947	NT	Homo sapiens chromosome 12 open reading frame 3 (C12ORF3), mRNA
2148	14725		2.39	3.0E-38	AF003530.1	NT	Homo sapiens homeobox protein CDX4 (CDX4) gene, complete cds and flanking repeat regions
3759	16360		1.37	3.0E-38	7548807	NT	Homo sapiens HIRA interacting protein 4 (dnal-like) (HIRIP4), mRNA
3922	16520	28687	2.12	3.0E-38	P53538	SWISSPROT	SSU72 PROTEIN
3922	16520	28688	2.12	3.0E-38	P53538	SWISSPROT	SSU72 PROTEIN
4721	17302		0.66	3.0E-38	BE279301.1	EST_HUMAN	601157633F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3504272 5'
6850	24772	32254	7.24	3.0E-38	AL163300.2	NT	Homo sapiens chromosome 21 segment HS21C100
7588	20103	32978	6.83	3.0E-38	BF373684.1	EST_HUMAN	CM3-FT0181-140700-241-07 FT0181 Homo sapiens cDNA
8584	21123	34043	2.01	3.0E-38	H85494.1	EST_HUMAN	y88b04.r1 Soares melanocyte 2NBHM Homo sapiens cDNA clone IMAGE:249775 5'
8584	21123	34044	2.01	3.0E-38	H85494.1	EST_HUMAN	y88b04.r1 Soares melanocyte 2NBHM Homo sapiens cDNA clone IMAGE:249775 5'
9882	22379		1.7	3.0E-38	AL163248.2	NT	Homo sapiens chromosome 21 segment HS21C048
11198	23703		1.54	3.0E-38	AL163248.2	NT	Homo sapiens chromosome 21 segment HS21C048
12461	13800	26312	1.44	3.0E-38	11435947	NT	Homo sapiens chromosome 12 open reading frame 3 (C12ORF3), mRNA
54	12734	25202	1.84	2.0E-38	AL163248.2	NT	Homo sapiens SMT3 (suppressor of mit two 3, yeast) homolog 2 (SMT3H2), mRNA
1422	14015	28544	2.23	2.0E-38	5902097	NT	

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1688	14280	26814	1.99	2.0E-38	AA437353.1	EST_HUMAN	zw30d01.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone IMAGE:770785 5' similar to SW:MA12_RABIT P45701 MANNOSYL-OLIGOSACCHARIDE ALPHA-1,2-MANNOSIDASE ;
1698	14280	26815	1.99	2.0E-38	AA437353.1	EST_HUMAN	zw30d01.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone IMAGE:770785 5' similar to
4881	17263	28714	2.98	2.0E-38	4557887	NT	SW:MA12_RABIT P45701 MANNOSYL-OLIGOSACCHARIDE ALPHA-1,2-MANNOSIDASE ;
5293	17855	30280	0.63	2.0E-38	BE296224.1	EST_HUMAN	Homo sapiens keratin 18 (KRT18) mRNA
5293	17855	30281	0.63	2.0E-38	BE296224.1	EST_HUMAN	601177386F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3532580 5'
5327	17837	30284	0.63	2.0E-38	AA437181.1	EST_HUMAN	601177386F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3532580 5'
7704	20213	33102	1.57	2.0E-38	AV721103.1	EST_HUMAN	601177386F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3532580 5'
8420	20960		5.5	2.0E-38	BE169880.1	EST_HUMAN	zw61d08.r1 Soares testis_NHT Homo sapiens cDNA clone HTBARH11 5'
8826	21365	34289	0.51	2.0E-38	F06450.1	EST_HUMAN	AV721103 HTB Homo sapiens cDNA clone HTBARH11 5'
8895	21433	34356	1.37	2.0E-38	AF069755.1	NT	MR3-HT0487-150200-113-g01 HT0487 Homo sapiens cDNA
8148	21683		0.89	2.0E-38	BE222256.1	EST_HUMAN	HSC1Bf031 normalized Infant brain cDNA Homo sapiens cDNA clone c-18f03
10345	22839	35835	1.96	2.0E-38	D63479.2	NT	Homo sapiens orphan G protein-coupled receptor HG20 (HG20) mRNA, complete cds
11114	23624	36665	3.38	2.0E-38	AA595480.1	EST_HUMAN	hu09g02.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3166130 3' similar to TR:O02710 Q02710
11114	23624	36666	3.38	2.0E-38	AA595480.1	EST_HUMAN	GAG POLYPEPTIDE ;
11383	23815	36876	6.15	2.0E-38	BE172790.1	EST_HUMAN	Homo sapiens mRNA for KIAA0145 protein, partial cds
11498	23945	37014	3.87	2.0E-38	AF190501.1	NT	nc34g03.s1 NCI_CGAP_Pt23 Homo sapiens cDNA clone IMAGE:1102612 3' similar to TR:E212318
11498	23945	37015	3.87	2.0E-38	AF190501.1	NT	E212318 NADP DEPENDENT LEUKOTREINE B4 12-HYDROXYDEHYDROGENASE ;
11753	24149		7.01	2.0E-38	AV726988.1	EST_HUMAN	nc34g03.s1 NCI_CGAP_Pt23 Homo sapiens cDNA clone IMAGE:1102612 3' similar to TR:E212318
11755	24150		1.88	2.0E-38	AB012723.1	NT	E212318 NADP DEPENDENT LEUKOTREINE B4 12-HYDROXYDEHYDROGENASE ;
12050	24334		3.19	2.0E-38	M55630.1	NT	QV2-HT0698-080800-293-a05 HT0698 Homo sapiens cDNA
12060	24343	31000	5.31	2.0E-38	H55641.1	EST_HUMAN	Homo sapiens leucine-rich repeat-containing G protein-coupled receptor 6 (LGR6) mRNA, partial cds
12128	24384		2.87	2.0E-38	S74906.1	NT	Homo sapiens leucine-rich repeat-containing G protein-coupled receptor 6 (LGR6) mRNA, partial cds
12624	24702		1.55	2.0E-38	11418248	NT	AV726988 HTC Homo sapiens cDNA clone HTCAHX07 5'
1132	13735		2.17	1.0E-38	AA401570.1	EST_HUMAN	Homo sapiens gene for kinesin-like protein, complete cds
2042	14624	27193	1.7	1.0E-38	4885286	NT	Homo sapiens topoisomerase I pseudogene 2
							CH220580 Chromosome 22 exon Homo sapiens cDNA clone C22_788 5'
							E1 beta-pyruvate dehydrogenase beta [promoter] [human, placenta, Genomic, 1280 nt]
							Homo sapiens suflotransferase-related protein (SULTX3), mRNA
							zu62b02.r1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:742539 5' similar to contains element
							MER19 repetitive element ;
							Homo sapiens guanine nucleotide binding protein-like 1 (GNL1), mRNA

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Table 4
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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2065	14645	27219	1.46	1.0E-38	7661069	NT	Homo sapiens KIAA0173 gene product (KIAA0173), mRNA
2539	15103	27678	1.71	1.0E-38	AF270831.1	NT	Homo sapiens cyclin K (CCNK) gene, exon 7
2645	15204	27777	14.26	1.0E-38	4758371	NT	Homo sapiens fibrinogen-like 1 (FGL1), mRNA
4235	16823	29274	1.03	1.0E-38	AB037863.1	NT	Homo sapiens mRNA for KIAA1442 protein, partial cds
4411	16996	29439	0.61	1.0E-38	4505016	NT	Homo sapiens low density lipoprotein receptor-related protein 6 (LRP6) mRNA, and translated products
4416	17001	29444	1.52	1.0E-38	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
4416	17001	29445	1.52	1.0E-38	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
4702	17284	29729	1.18	1.0E-38	8922543	NT	Homo sapiens hypothetical protein FLJ10800 (FLJ10800), mRNA
5289	17851		29.49	1.0E-38	N46880.1	EST_HUMAN	y58a01.r1 Soares_multiple_sclerosis_2NbhMSP Homo sapiens cDNA clone IMAGE:277704 5' similar to SW:CA1H_MOUSE P39081 COLLAGEN ALPHA 1(XV/III) CHAIN PRECURSOR. ;
6178	18788	31556	4.28	1.0E-38	7305360	NT	Mus musculus otogelin (Otog), mRNA
6178	18788	31557	4.28	1.0E-38	7305360	NT	Mus musculus otogelin (Otog), mRNA
7435	19959	32824	3	1.0E-38	AB014512.1	NT	Homo sapiens mRNA for KIAA0612 protein, partial cds
9080	21618	34551	0.97	1.0E-38	11422250	NT	Homo sapiens hypothetical protein FLJ10600 (FLJ10600), mRNA
9331	21845	34795	6.34	1.0E-38	BE350127.1	EST_HUMAN	h09g01.x1 NCI_CGAP_Kid13 Homo sapiens cDNA clone IMAGE:3146256 3' similar to contains MER29.b3 MER29 repetitive element ;
11465	23915	36983	1.91	1.0E-38	7682106	NT	Homo sapiens KIAA0426 gene product (KIAA0426), mRNA
11806	24808		2.57	1.0E-38	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
58	12738	25208	8.61	8.0E-39	4502312	NT	Homo sapiens ATPase, H+ transporting, lysosomal (vacuolar proton pump) 16kD (ATP6C) mRNA
1438	14031	28559	1.49	8.0E-39	4758229	NT	Homo sapiens estrogen receptor-binding fragment-associated gene 9 (EBAG9) mRNA
1869	14455		0.88	8.0E-39	A1823404.1	EST_HUMAN	wh5310.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3284491 3' similar to TR:P87890 P87890 POL PROTEIN ;
2141	14719	27290	3.68	7.0E-39	AL163227.2	NT	Homo sapiens chromosome 21 segment HS21C027
10688	23218	36230	2.32	6.0E-39	BF331829.1	EST_HUMAN	QV1-BT0631-040900-357402 BT0631 Homo sapiens cDNA
11639	24078	37138	1.54	8.0E-39	11526372	NT	Homo sapiens hyaluronan-mediated motility receptor (RHAMM) (HMMR), mRNA
12532	24845		2.92	6.0E-39	BE870394.1	EST_HUMAN	7a34c03.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3284356 3' similar to WP.R151.6 CE00828 ;
1045	13853	28165	1.85	5.0E-39	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
3014	15630	28108	7.14	5.0E-39	A1750154.1	EST_HUMAN	at36b04.x1 Barstead colon HPLRB7 Homo sapiens cDNA clone IMAGE:2374063 3' similar to TR:Q15408 Q15408 NEUTRAL PROTEASE LARGE SUBUNIT, contains LTR7.11 LTR7 repetitive element ;
12219	24441		2.89	5.0E-39	11420289	NT	Homo sapiens hypothetical protein FLJ10803 (FLJ10803), mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
576	13206	25688	35.11	4.0E-39	AB015610.1	NT	Chlorocephus aethiops mRNA for ribosomal protein S4X, complete cds
3631	16234	28708	0.75	4.0E-39	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
5995	18615	31350	0.73	4.0E-39	11422113	NT	Homo sapiens EBNA-2 co-activator (100KD) (p100), mRNA
5995	18615	31351	0.73	4.0E-39	11422113	NT	Homo sapiens EBNA-2 co-activator (100KD) (p100), mRNA
8020	20562	33463	0.95	4.0E-39	AA682949.1	EST_HUMAN	ssg2g04.s1 Stralagene schizo brain S11 Homo sapiens cDNA clone IMAGE:1020438 3' similar to contains OFR.b1 OFR repetitive element;
9252	21778	34728	0.82	4.0E-39	D84116.1	NT	Homo sapiens DNA for prostacyclin synthase, exon 2
9252	21778	34729	0.82	4.0E-39	D84116.1	NT	Homo sapiens DNA for prostacyclin synthase, exon 2
12237	24452		4.45	4.0E-39	11418177	NT	Homo sapiens Ran GTPase activating protein 1 (RANGAP1), mRNA
12363	24536		5.52	4.0E-39	BE838452.1	EST_HUMAN	QVQ-FN0063-260800-278-c06 FN0063 Homo sapiens cDNA
51	12731	25196	16.62	3.0E-39	AA631949.1	EST_HUMAN	fmfc16 Regional genomic DNA specific cDNA library Homo sapiens cDNA clone CR12-1
51	12731	25197	16.62	3.0E-39	AA631949.1	EST_HUMAN	fmfc16 Regional genomic DNA specific cDNA library Homo sapiens cDNA clone CR12-1
51	12731	25198	16.62	3.0E-39	AA631949.1	EST_HUMAN	fmfc16 Regional genomic DNA specific cDNA library Homo sapiens cDNA clone CR12-1
11744	24143	36764	6.46	3.0E-39	A084557.1	EST_HUMAN	ox63a10.s1 Soares NIHMPu, S1 Homo sapiens cDNA clone IMAGE:1660986 3' similar to SW:GTR5_RAT P43427 GLUCOSE TRANSPORTER TYPE 5, SMALL INTESTINE ;
11744	24143	36765	6.46	3.0E-39	A084557.1	EST_HUMAN	ox63a10.s1 Soares NIHMPu, S1 Homo sapiens cDNA clone IMAGE:1660986 3' similar to SW:GTR5_RAT P43427 GLUCOSE TRANSPORTER TYPE 5, SMALL INTESTINE ;
11781	24174		6.63	3.0E-39	H37903.1	EST_HUMAN	ye51c06.s1 Soares retina N2b4HR Homo sapiens cDNA clone IMAGE:190954 3'
930	13543		9.84	2.0E-39	BE408203.1	EST_HUMAN	601301607F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3636289 5'
945	13558		15.07	2.0E-39	A1525119.1	EST_HUMAN	promina-7.D01.r bvtumor Homo sapiens cDNA 5'
1089	13674		3.85	2.0E-39	A000573.1	NT	Homo sapiens homogenisate 1,2-dioxygenase gene, complete cds
1577	14170		41.87	2.0E-39	AW372318.1	EST_HUMAN	PMO-BT0340-211299-003-d02 BT0340 Homo sapiens cDNA
2016	14598	27162	2.5	2.0E-39	AA720574.1	EST_HUMAN	nw21g02.s1 NCI_CGAP_GC80 Homo sapiens cDNA clone IMAGE:1241138 3' similar to contains THR.13 THR repetitive element ;
2657	15216	27788	1.56	2.0E-39	AL163248.2	NT	Homo sapiens chromosome 21 segment HS21C048
4482	17077	29527	1.7	2.0E-39	BF370207.1	EST_HUMAN	RC4-FN0037-280700-011-a10 FN0037 Homo sapiens cDNA
5882	18309	30804	3.89	2.0E-39	AA508880.1	EST_HUMAN	ng86603.s1 NCI_CGAP_P16 Homo sapiens cDNA clone IMAGE:941683
7405	19630	32784	1.95	2.0E-39	AA080867.1	EST_HUMAN	zn08602.r1 Stralagene hNT neuron (8937233) Homo sapiens cDNA clone IMAGE:546651 5'
8252	20763	33710	0.55	2.0E-39	AF078719.1	NT	Rattus norvegicus putative four repeat ion channel mRNA, complete cds
9415	21924		0.56	2.0E-39	AA984531.1	EST_HUMAN	am88c11.s1 Stralagene schizo brain S11 Homo sapiens cDNA clone IMAGE:1630196 3'
9544	22044		0.54	2.0E-39	A1686660.1	EST_HUMAN	tu35e03.x1 NCI_CGAP_P128 Homo sapiens cDNA clone IMAGE:2253052 3'
11309	23802	36963	3.11	2.0E-39	D86984.1	NT	Human mRNA for KIAA0209 gene, partial cds
1560	14152	26684	2.33	1.0E-39	AJ006345.1	NT	Homo sapiens KVLQT1 gene
1560	14152	26685	2.33	1.0E-39	AJ006345.1	NT	Homo sapiens KVLQT1 gene

Table 4

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1578	14171	28700	9.78	1.0E-39	7657020	NT	Homo sapiens DKFZP434P211 protein (DKFZP434P211), mRNA
4719	17300	29745	0.87	1.0E-39	AW296073.1	EST_HUMAN	U1H-BWO-aii-h-06-0-U1.s1 NCL CGAP_Sub6 Homo sapiens cDNA clone IMAGE:2730850 3'
4764	17345	28793	4.98	1.0E-39	AW951995.1	EST_HUMAN	EST364065 MAGE resequences, MAGB Homo sapiens cDNA
4764	17345	28794	4.98	1.0E-39	AW951995.1	EST_HUMAN	EST364065 MAGE resequences, MAGB Homo sapiens cDNA
4812	17390	29841	10.18	1.0E-39	7657020	NT	Homo sapiens DKFZP434P211 protein (DKFZP434P211), mRNA
5561	18192	30638	0.86	1.0E-39	11417342	NT	Homo sapiens sema domain, seven thrombospondin repeats (type 1 and type 1-like), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 5A (SEMASA), mRNA
5561	18192	30639	0.86	1.0E-39	11417342	NT	Homo sapiens sema domain, seven thrombospondin repeats (type 1 and type 1-like), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 5A (SEMASA), mRNA
5812	18436	31157	1.13	1.0E-39	T80876.1	EST_HUMAN	Y226g06.r1 Soares fetal liver spleen INFLS Homo sapiens cDNA clone IMAGE:109402 5' similar to contains Alu repetitive element; contains LTR1 repetitive element
5845	18469	31194	5.75	1.0E-39	AJ278170.1	NT	Mus musculus mRNA for neuronal interacting factor X 1 (NIX1) (Nix1 gene)
5845	18469	31195	5.75	1.0E-39	AJ278170.1	NT	Mus musculus mRNA for neuronal interacting factor X 1 (NIX1) (Nix1 gene)
5914	19573	32790	1.87	1.0E-39	11438736	NT	Homo sapiens tubby like protein 3 (TULP3), mRNA
7400	19925	32790	2.28	1.0E-39	D78132.1	NT	Homo sapiens mRNA for ras-related GTP-binding protein, complete cds
8499	21038	33959	0.85	1.0E-39	O46530	SWISSPROT	RIBONUCLEASE K6 PRECURSOR (RNASE K6)
12161	24401		4.3	1.0E-39	U07000.1	NT	Human breakpoint cluster region (BCR) gene, complete cds
581	13211	25689	2.07	9.0E-40	5803210	NT	Homo sapiens UDP-glucose pyrophosphorylase 2 (UGP2), mRNA
1278	13873	26392	20.54	9.0E-40	4755145	NT	Homo sapiens AE-binding protein 1 (AEBP1) mRNA
1278	13873	26393	20.54	9.0E-40	4755145	NT	Homo sapiens AE-binding protein 1 (AEBP1) mRNA
1498	14090	26630	1.54	9.0E-40	4507512	NT	Homo sapiens tissue inhibitor of metalloproteinase 3 (Sorsby fundus dystrophy, pseudoinflammatory) (TIMP3) mRNA
3853	18451	28914	0.68	9.0E-40	4503764	NT	Homo sapiens fragile X mental retardation 1 (FMR1) mRNA
4045	18004	29108	3.57	9.0E-40	AB033070.1	NT	Homo sapiens mRNA for KIAA1244 protein, partial cds
3077	15692	28166	1	8.0E-40	AA078165.1	EST_HUMAN	7H15A04 Chromosome 7 Hel a cDNA Library Homo sapiens cDNA clone 7H15A04
3996	16594		1.74	8.0E-40	BE396541.1	EST_HUMAN	601288958FT NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3819166 5'
7702	20211	33098	2.01	7.0E-40	U60325.1	NT	Human DNA polymerase gamma mRNA, nuclear gene encoding mitochondrial protein, complete cds
7702	20211	33099	2.01	7.0E-40	U60325.1	NT	Human DNA polymerase gamma mRNA, nuclear gene encoding mitochondrial protein, complete cds
10776	23300	36306	2.48	7.0E-40	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
2753	15308	27873	5.43	6.0E-40	AA381275.1	EST_HUMAN	EST70527 T-cell lymphoma Homo sapiens cDNA 5' end similar to zinc finger protein family

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Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2753	15308	27874	5.43	6.0E-40	AA361275.1	EST_HUMAN	EST70527 T-cell lymphoma Homo sapiens cDNA 5' end similar to zinc finger protein family
6094	18710		2.11	6.0E-40	BE504786.1	EST_HUMAN	h240g01.x1 NCL_CGAP_GC8 Homo sapiens cDNA clone IMAGE:3210480 3'
6286	18904		1.42	6.0E-40	7661989	NT	Homo sapiens KIAA0211 gene product (KIAA0211), mRNA
7015	19513	32334	4.18	6.0E-40	11439783	NT	Homo sapiens fatty acid desaturase 1 (FADS1), mRNA
7015	19513	32335	4.18	6.0E-40	11439783	NT	Homo sapiens fatty acid desaturase 1 (FADS1), mRNA
9887	22384	35360	8.69	6.0E-40	AV653028.1	EST_HUMAN	AV653028 GLC Homo sapiens cDNA clone GLCDDGF04 3'
9887	22384	35361	8.69	6.0E-40	AV653028.1	EST_HUMAN	AV653028 GLC Homo sapiens cDNA clone GLCDDGF04 3'
1919	14504	27061	1.42	4.0E-40	AI686005.1	EST_HUMAN	191901.x1 NCL_CGAP_P128 Homo sapiens cDNA clone IMAGE:2248873 3' similar to TR:O73505 O73505 POL PROTEIN. ;
2155	14732		1.38	4.0E-40	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
4478	17063	29513	9.28	4.0E-40	7682117	NT	Homo sapiens KIAA0433 protein (KIAA0433), mRNA
7827	20369	33277	0.59	4.0E-40	AU127831.1	EST_HUMAN	AU127831 NT2RP2 Homo sapiens cDNA clone NT2RP2002172 5'
7833	20475	33384	4.44	4.0E-40	AA742809.1	EST_HUMAN	h24e10.r1 NCL_CGAP_B14 Homo sapiens cDNA clone IMAGE:1222122
8885	21523	34451	3.91	4.0E-40	BE009416.1	EST_HUMAN	PMO-BN0167-070500-002-h12 BN0167 Homo sapiens cDNA
8885	21523	34452	3.91	4.0E-40	BE009416.1	EST_HUMAN	PMO-BN0167-070500-002-h12 BN0167 Homo sapiens cDNA
10595	23129	36143	3.06	4.0E-40	AW841585.1	EST_HUMAN	RC1-CN0017-120200-012-e04 CN0017 Homo sapiens cDNA
4212	19801	29250	0.89	3.0E-40	AI925949.1	EST_HUMAN	wh1287.x1 NCL_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2380549 3'
6750	19343	32150	7.27	3.0E-40	11417342	NT	Homo sapiens sema domain, seven thrombospondin repeats (type 1 and type 1-like), transmembrane domain (TM) and short cytoplasmic domain, (semaforin) 5A (SEMA5A), mRNA
8321	20862	33787	3.69	3.0E-40	5454167	NT	Homo sapiens HBV associated factor (XAP4) mRNA
8899	21437	34360	1.28	3.0E-40	AF078779.1	NT	Rattus norvegicus putative four repeat ion channel mRNA, complete cds
9138	21673	34615	1.58	3.0E-40	AF078779.1	NT	Rattus norvegicus putative four repeat ion channel mRNA, complete cds
10541	23078	36092	1.79	3.0E-40	D86984.1	NT	Human mRNA for KIAA0209 gene, partial cds
10903	23423	36442	2.21	3.0E-40	BE350127.1	EST_HUMAN	h09g01.x1 NCL_CGAP_Kid13 Homo sapiens cDNA clone IMAGE:3146256 3' similar to contains MER29.63
11145	23653	36695	13.89	3.0E-40	6005813	NT	MER29 repetitive element ; Homo sapiens serine threonine protein kinase (NDR), mRNA
11445	23895	36960	1.58	3.0E-40	AW118799.1	EST_HUMAN	xd96h02.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2605491 3' similar to TR:Q15804 Q15804 SIMILAR TO ENV OF TYPE A AND TYPE B RETROVIRUSES AND TO CLASS II HERVS ;
347	12898		4.35	2.0E-40	AI223036.1	EST_HUMAN	qg52h08.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1838847 3'
827	13444		22.71	2.0E-40	AW303868.1	EST_HUMAN	h24e10.x1 NCL_CGAP_U14 Homo sapiens cDNA clone IMAGE:2761098 3' similar to SW:RS6_MOUSE P97461 40S RIBOSOMAL PROTEIN S5. ;

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1865	14451		1.38	2.0E-40	AV731801.1	EST_HUMAN	AV731801 HTF Homo sapiens cDNA clone HTFAZE05 5'
1978	14561	27119	1.39	2.0E-40	4506188	NT	Homo sapiens proteasome (prosome, macropain) subunit, alpha type, 7 (PSMA7) mRNA, and translated products
1978	14561	27120	1.39	2.0E-40	4506188	NT	Homo sapiens proteasome (prosome, macropain) subunit, alpha type, 7 (PSMA7) mRNA, and translated products
2116	14694	27262	0.95	2.0E-40	AI988562.1	EST_HUMAN	w80a11.x1 NCI CGAP_GC6 Homo sapiens cDNA clone IMAGE:2514716 3' similar to TR:Q91929 Q91929
2214	14789	27363	1.86	2.0E-40	5453592	NT	ZINC FINGER PROTEIN ;
2714	15271		1.25	2.0E-40	BE275932.1	EST_HUMAN	Homo sapiens adenyl cyclase-associated protein 2 (CAP2) mRNA
3160	15774	28242	4.32	2.0E-40	5453592	NT	601121597F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3345784 5'
5027	17601	30046	1.84	2.0E-40	AL163280.2	NT	Homo sapiens adenyl cyclase-associated protein 2 (CAP2) mRNA
5027	17601	30047	1.84	2.0E-40	AL163280.2	NT	Homo sapiens chromosome 21 segment HS21C080
5378	17938	30351	3.28	2.0E-40	4505880	NT	Homo sapiens chromosome 21 segment HS21C080
916	13529		1.05	1.0E-40	AA225889.1	EST_HUMAN	Homo sapiens plasminogen (PLG) mRNA
3337	15947		1.47	1.0E-40	4507142	NT	nc08a09.st NCI CGAP_Pri Homo sapiens cDNA clone IMAGE:1007608
4716	17297	29742	4.95	1.0E-40	4508012	NT	Homo sapiens sorting nexin 3 (SNX3) mRNA
6403	18006	31786	0.69	1.0E-40	W92708.1	EST_HUMAN	Homo sapiens zinc finger protein 200 (ZNF200) mRNA, and translated products
6403	18006	31787	0.69	1.0E-40	W92708.1	EST_HUMAN	zn79f11.s1 Soares fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:418317 3'
7145	19678	32518	2.12	1.0E-40	AA573201.1	EST_HUMAN	zn79f11.s1 Soares fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:418317 3'
7145	19678	32519	2.12	1.0E-40	AA573201.1	EST_HUMAN	n42104.s1 NCI CGAP_AA1 Homo sapiens cDNA clone IMAGE:995167 3'
7263	19811	32667	0.83	1.0E-40	P28808	SWISSPROT	n42104.s1 NCI CGAP_AA1 Homo sapiens cDNA clone IMAGE:995167 3'
10797	23320	36330	4.13	1.0E-40	AU149345.1	EST_HUMAN	POL POLYPROTEIN[CONTAINS: PROTEASE : REVERSE TRANSCRIPTASE ; RIBONUCLEASE H]
11815	24057		1.72	1.0E-40	AL163246.2	NT	AU149345 NT2RM4 Homo sapiens cDNA clone NT2RM4002122 3'
12182	24956		7.52	1.0E-40	BF334112.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C046
3876	18474	28938	0.65	9.0E-41	W01596.1	EST_HUMAN	MR2-CT0222-211099-002-e10 CT0222 Homo sapiens cDNA
7862	20404	33311	1.68	8.0E-41	AL163203.2	NT	zn36a02.1 Soares fetal_liver_spleen_1NFLS Homo sapiens cDNA clone IMAGE:294602 5'
861	15427	25990	1.58	7.0E-41	AI934384.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C003
861	15427	25991	1.58	7.0E-41	AI934384.1	EST_HUMAN	wp04h04.x1 NCI CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2463895 3'
5411	17968	30377	0.95	7.0E-41	11431114	NT	wp04h04.x1 NCI CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2463895 3'
5469	18103	30422	0.84	7.0E-41	11546770	NT	Homo sapiens hypothetical protein (FLJ10998), mRNA
6159	18772	31535	3.44	7.0E-41	11419208	NT	Homo sapiens hypothetical protein FLJ13188 (FLJ13188), mRNA
6494	18095	31879	0.8	7.0E-41	11433010	NT	Homo sapiens a disintegrin and metalloproteinase domain 22 (ADAM22), mRNA
7067	18086	30442	0.95	7.0E-41	U72335.1	NT	Homo sapiens IQ motif containing GTPase activating protein 1 (IQGAP1), mRNA
							Human platelet activating factor acetylhydrolase, brain isoform, 45 kDa subunit (LIS1) gene, exons 3 and 4

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11311	23804	36884	1.88	7.0E-41	4758445	NT	Homo sapiens guanine nucleotide binding protein 10 (GNG10) mRNA
12631	24952		8.97	7.0E-41	11417972	NT	Homo sapiens pascadillo (zabrafish) homolog 1, containing BRCT domain (PES1), mRNA
302	12857	25447	1.42	6.0E-41	AB037163.1	NT	Homo sapiens DSCR5b mRNA, complete cds
2157	14734	27307	2.33	6.0E-41	7857042	NT	Homo sapiens Down syndrome candidate region 1 (DSCR1), mRNA
7912	20454	33360	1.58	6.0E-41	BF513783.1	EST_HUMAN	UIH-BW1-amp-b-03-0-UJ.s1 NCI_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3070421 3'
12611	24873		1.61	6.0E-41	AW873637.1	EST_HUMAN	ho6408.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:3042183 3' similar to contains
1838	14426	26977	2.16	5.0E-41	T62628.1	EST_HUMAN	MER32.b3 MER32 repetitive element 1
4184	16774		1.01	5.0E-41	4855636	NT	yc03e10.s1 Stratiene lung (#937210) Homo sapiens cDNA clone IMAGE:79628 3'
6667	18263		1.87	5.0E-41	BE087042.1	EST_HUMAN	Homo sapiens target of myb1 (chicken) homolog (TOM1), mRNA
414	13048		1.58	4.0E-41	BE156318.1	EST_HUMAN	PM4-BT0341-251199-002-F11 BT0341 Homo sapiens cDNA
1137	13740	26249	1.12	4.0E-41	AU118344.1	EST_HUMAN	QV0-HT0367-150200-114-g09 HT0367 Homo sapiens cDNA
							AU118344 HEMBA1 Homo sapiens cDNA clone HEMBA1005583 5'
1455	14047	26577	9.23	4.0E-41	A027117.1	EST_HUMAN	ow45e06.s1 Soares_papillary tumor_NbHPA Homo sapiens cDNA clone IMAGE:1649794 3' similar to
							TR:O00597 O00597 CYTOCHROME C-LIKE POLYPEPTIDE. :contains LTR5.b1 LTR5 repetitive element ;
1455	14047	26578	9.23	4.0E-41	A027117.1	EST_HUMAN	ow45e06.s1 Soares_papillary tumor_NbHPA Homo sapiens cDNA clone IMAGE:1649794 3' similar to
1469	14061	26596	1.67	4.0E-41	AB008681.1	NT	TR:O00597 O00597 CYTOCHROME C-LIKE POLYPEPTIDE. :contains LTR5.b1 LTR5 repetitive element ;
							Homo sapiens gene for activin receptor type IIB, complete cds
1677	14269	26802	8.43	4.0E-41	A1500406.1	EST_HUMAN	tm86c04.x1 NCI_CGAP_Brr25 Homo sapiens cDNA clone IMAGE:2165958 3' similar to contains OFR.b1
2913	15530	28001	3.73	4.0E-41	AJ229041.1	NT	OFR repetitive element ;
2913	15530	28002	3.73	4.0E-41	AJ229041.1	NT	Homo sapiens 959 kb contig between AML1 and CBR1 on chromosome 21q22; segment 1/3
4225	18813	26260	2.27	4.0E-41	X92685.1	NT	Homo sapiens 959 kb contig between AML1 and CBR1 on chromosome 21q22; segment 1/3
6632	19228		1.38	4.0E-41	AV758295.1	EST_HUMAN	H sapiens DNase I hypersensitive site (HSS-3) enhancer element
8610	22110	35072	6.75	4.0E-41	BF504683.1	EST_HUMAN	AV758295 BM Homo sapiens cDNA clone BMFBHC06 5'
11522	23970		9.87	4.0E-41	AV710480.1	EST_HUMAN	601888096F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4122119 5'
12375	24841		2.28	4.0E-41	AV708431.1	EST_HUMAN	AV710480 Cu Homo sapiens cDNA clone CuAAC007 5'
12670	24669	30875	4.65	4.0E-41	BE887118.1	EST_HUMAN	AV708431 ADC Homo sapiens cDNA clone ADCARE02 5'
983	13595	26109	1.64	3.0E-41	AB030176.1	NT	601508315F1 NH_MGC_71 Homo sapiens cDNA clone IMAGE:3910059 5'
							Homo sapiens PAD-H19 mRNA for peptidylarginine deiminase type II, complete cds
4428	17014	26456	2.7	3.0E-41	AB026898.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
5273	17834		1.03	3.0E-41	AB037748.1	NT	Homo sapiens mRNA for KIAA1327 protein, partial cds
5683	18310	30805	9.55	3.0E-41	X87689.1	NT	H sapiens mRNA for putative p64 CLCP protein

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6518	19118	31909	1.73	3.0E-41	AB037808.1	NT	Homo sapiens mRNA for KIAA1387 protein, partial cds
7761	20269	33167	0.7	3.0E-41	R54785.1	EST_HUMAN	y75008.r1 Soares breast 2NhbBst Homo sapiens cDNA clone IMAGE:154575 5'
11575	24021	37090	1.78	3.0E-41	AJ228041.1	NT	Homo sapiens 959 kb contig between AML1 and CBR1 on chromosome 21q22, segment 1/3
11703	24118		1.84	3.0E-41	AA609768.1	EST_HUMAN	af17710.s1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1031947 3'
1864	14200	26734	15.09	2.0E-41	U43701.1	NT	Human ribosomal protein L23a mRNA, complete cds
2001	14583	27142	1.76	2.0E-41	AA331940.1	EST_HUMAN	EST35818 Embryo, 8 week 1 Homo sapiens cDNA 5' end
2260	14834	27412	1.13	2.0E-41	D86962.1	NT	Human mRNA for KIAA0207 gene, complete cds
2308	14890	27456	3.79	2.0E-41	X89631.1	NT	G. gorilla DNA for ZNF80 gene homolog
2855	14200	26734	10.87	2.0E-41	U43701.1	NT	Human ribosomal protein L23a mRNA, complete cds
4728	17309	29753	2.07	2.0E-41	AL163267.2	NT	Homo sapiens chromosome 21 segment HS21C087
4728	17309	29754	2.07	2.0E-41	AL163267.2	NT	Homo sapiens chromosome 21 segment HS21C087
7666	20178	33065	6.67	2.0E-41	AF038404.1	NT	Homo sapiens homolog of Nedd5 (hNedd5) mRNA, complete cds
8013	20555	33458	1.36	2.0E-41	M96944.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
8013	20555	33459	1.36	2.0E-41	M96944.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
8040	20582	33489	1.59	2.0E-41	AA328265.1	EST_HUMAN	EST31723 Embryo, 12 week 1 Homo sapiens cDNA 5' end
8905	21443	34356	1.61	2.0E-41	P52742	SWISSPROT	ZINC FINGER PROTEIN 135
9338	21852	34800	0.74	2.0E-41	11417118	NT	Homo sapiens KIAA0433 protein (KIAA0433), mRNA
9338	21852	34801	0.74	2.0E-41	11417118	NT	Homo sapiens KIAA0433 protein (KIAA0433), mRNA
11359	23813	36873	3.76	2.0E-41	AA372637.1	EST_HUMAN	EST84555 Colon adenocarcinoma IV Homo sapiens cDNA 5' end
3240	15852	28333	1.11	1.0E-41	BE869735.1	EST_HUMAN	601445647F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3849803 5'
3240	15852	28334	1.11	1.0E-41	BE869735.1	EST_HUMAN	601445647F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3849803 5'
4668	17248	29701	11.21	1.0E-41	8878468	NT	Mus musculus tubulin alpha 6 (Tubae6), mRNA
9339	21853	34802	1.82	1.0E-41	AJ217868.1	EST_HUMAN	q775c10.x1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1755858 3'
11039	23553	36588	2.41	1.0E-41	AW847812.1	EST_HUMAN	IL3-CT0213-180200-040-F08 CT0213 Homo sapiens cDNA
11842	24204		2.37	1.0E-41	11528291	NT	Homo sapiens hypothetical protein FLJ20454 (FLJ20454), mRNA
8457	20997		1.34	9.0E-42	BE179191.1	EST_HUMAN	RC0-HT0613-210300-032-g01 HT0613 Homo sapiens cDNA
9101	21637	34575	2.43	9.0E-42	11560151	NT	Homo sapiens hypothetical C2H2 zinc finger protein FLJ22504 (FLJ22504), mRNA
9101	21637	34576	2.43	9.0E-42	11560151	NT	Homo sapiens hypothetical C2H2 zinc finger protein FLJ22504 (FLJ22504), mRNA
488	13121	25607	7.59	8.0E-42	AF003530.1	NT	Homo sapiens homeobox protein CDX4 (CDX4) gene, complete cds and flanking repeat regions
11881	24959		53.38	8.0E-42	AA493896.1	EST_HUMAN	h07c02.s1 NCI_CGAP_Thy1 Homo sapiens cDNA clone IMAGE:943586 similar to TR:G434304 G434304 367BP EXPRESSED SEQUENCE TAG MRNA
11900	24830		2.62	8.0E-42	AW089062.1	EST_HUMAN	xc97a04.x1 NCI_CGAP_Brn35 Homo sapiens cDNA clone IMAGE:2592174 3' similar to contains OFR.12
967	13578		2.5	7.0E-42	AL163285.2	NT	OFR repetitive element; Homo sapiens chromosome 21 segment HS21C085

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8406	20948		0.62	7.0E-42	R10963.1	EST_HUMAN	y38g04.1 Soares fetal liver spleen 1NfLS Homo sapiens cDNA clone IMAGE:129174 5'
9168	21745	34688	1.96	7.0E-42	AI204358.1	EST_HUMAN	qf58g12.x1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1754278 3'
11052	23565	36600	1.59	7.0E-42	AA569592.1	EST_HUMAN	mf23g07.s1 NCI_CGAP_P1 Homo sapiens cDNA clone IMAGE:914652
11052	23565	36601	1.59	7.0E-42	AA569592.1	EST_HUMAN	mf23g07.s1 NCI_CGAP_P1 Homo sapiens cDNA clone IMAGE:914652
1896	14481	27039	4.44	6.0E-42	AF012872.1	NT	Homo sapiens phosphatidylinositol 4-kinase 230 (p4K230) mRNA, complete cds
1896	14481	27040	4.44	6.0E-42	AF012872.1	NT	Homo sapiens phosphatidylinositol 4-kinase 230 (p4K230) mRNA, complete cds
2328	14899		3.36	6.0E-42	AW238656.1	EST_HUMAN	xp29f08.x1 NCI_CGAP_HN10 Homo sapiens cDNA clone IMAGE:2741799 3' similar to contains L1.H L1 repetitive element
5659	18288	30764	1.48	6.0E-42	AB028990.1	NT	Homo sapiens mRNA for KIAA1067 protein, partial cds
5893	18288	30764	1.5	6.0E-42	AB028990.1	NT	Homo sapiens mRNA for KIAA1067 protein, partial cds
141	12806		6.21	5.0E-42	AJ271735.1	NT	Homo sapiens Xa pseudautosomal region; segment 1/2
463	13097	25588	1.39	5.0E-42	BE217913.1	EST_HUMAN	hvd31e11.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3175052 3'
512	13145		4.36	5.0E-42	5730038	NT	Homo sapiens SET domain and mariner transposase fusion gene (SETMAR) mRNA
513	13146		2.72	5.0E-42	5730038	NT	Homo sapiens SET domain and mariner transposase fusion gene (SETMAR) mRNA
6788	19379	32194	1.23	5.0E-42	11433063	NT	Homo sapiens ubiquitin protein ligase E3A (human papilloma virus E6-associated protein, Angelman syndrome) (UBE3A), mRNA
6788	19379	32195	1.23	5.0E-42	11433063	NT	Homo sapiens ubiquitin protein ligase E3A (human papilloma virus E6-associated protein, Angelman syndrome) (UBE3A), mRNA
6893	19627	32464	2.58	5.0E-42	11417957	NT	Homo sapiens myotubularin related protein 3 (MTMR3), mRNA
7253	19781	32637	1.84	5.0E-42	AF071569.1	NT	Homo sapiens multifunctional calcium/calmodulin-dependent protein kinase II delta isoform mRNA, complete cds
8713	21252	34174	2.85	5.0E-42	AB037715.1	NT	Homo sapiens mRNA for KIAA1294 protein, partial cds
10495	22889	35997	0.6	5.0E-42	11431168	NT	Homo sapiens 3-hydroxyanthranilate 3,4-dioxygenase (HAAO), mRNA
10495	22889	35998	0.6	5.0E-42	11431168	NT	Homo sapiens 3-hydroxyanthranilate 3,4-dioxygenase (HAAO), mRNA
10877	23398	36415	1.92	5.0E-42	8923162	NT	Homo sapiens hypothetical protein FLJ20163 (FLJ20163), mRNA
793	13402	25905	7.93	4.0E-42	AF055066.1	NT	Homo sapiens MHC class 1 region
783	13402	25906	7.93	4.0E-42	AF055066.1	NT	Homo sapiens MHC class 1 region
1104	13708	26217	2.39	4.0E-42	AF189011.1	NT	Homo sapiens ribonuclease III (RN3) mRNA, complete cds
4272	18858	29307	1.46	4.0E-42	X59417.1	NT	H. sapiens PROS-27 mRNA
4335	16922	29384	5.27	4.0E-42	4506496	NT	Homo sapiens regulatory factor X, 4 (influences HLA class II expression) (RFX4) mRNA
4683	17265	29715	13.42	4.0E-42	4508008	NT	Homo sapiens zinc finger protein 177 (ZNF177) mRNA
5353	17913	30328	0.94	4.0E-42	7661635	NT	Homo sapiens DKFZP564O2082 protein (DKFZP564O2082), mRNA
10378	22872	35865	0.46	4.0E-42	AW371201.1	EST_HUMAN	CNM-BT0282-171289-127-b03 BT0282 Homo sapiens cDNA
10528	23085	36076	1.76	4.0E-42	AW818630.1	EST_HUMAN	RC1-ST0278-040400-018-h11 ST0278 Homo sapiens cDNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10528	23065	36077	1.76	4.0E-42	AW18630.1	EST_HUMAN	RC1-ST0278-040400-018-h11 ST0278 Homo sapiens cDNA
11280	23742	36799	3.45	4.0E-42	BF035327.1	EST_HUMAN	601458531F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3862086 5'
1530	14122	26661	4.49	2.0E-42	BF376834.1	EST_HUMAN	RC0-TN0079-110900-024-g07 TN0079 Homo sapiens cDNA
2436	15003	27575	0.92	2.0E-42	AV690218.1	EST_HUMAN	AV690218 GKCC Homo sapiens cDNA clone GKCCBB08 5'
2456	15023		2.69	2.0E-42	AW898344.1	EST_HUMAN	RC3-NN0070-270400-011-h10 NN0070 Homo sapiens cDNA
2469	15036	27603	2.41	2.0E-42	AW250059.1	EST_HUMAN	2819293.3prime NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2819293 3'
5931	18553	31279	13.21	2.0E-42	AW955398.1	EST_HUMAN	EST367438 MAGC resequences, MAGC Homo sapiens cDNA
5931	18553	31280	13.21	2.0E-42	AW955398.1	EST_HUMAN	EST367438 MAGC resequences, MAGC Homo sapiens cDNA
6849	19439	32253	0.84	2.0E-42	A052586.1	EST_HUMAN	ow63405.x1 Soares_fetal_liver_spleen_1NLS_S1 Homo sapiens cDNA clone IMAGE:1653417 3'
9755	22253	35235	1.1	2.0E-42	BE538918.1	EST_HUMAN	601061284F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3447620 5'
9967	22462	35445	0.53	2.0E-42	P81649	SWISSPROT	RIBONUCLEASE K3 (RNASE K3)
9967	22462	35446	0.53	2.0E-42	P81649	SWISSPROT	RIBONUCLEASE K3 (RNASE K3)
11585	24030	37100	1.55	2.0E-42	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
763	13381	25880	1.52	1.0E-42	X57147.1	NT	Human endogenous retrovirus pHE.1 (ERV9)
1080	13695	26197	0.84	1.0E-42	AW295809.1	EST_HUMAN	UI-H-B11-afh-e-04-0-U1 s1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2721871 3'
1140	13743	26252	2.08	1.0E-42	AJ251818.1	NT	Homo sapiens partial C9 gene for complement component C9, exon 1
1140	13743	26253	2.08	1.0E-42	AJ251818.1	NT	Homo sapiens partial C9 gene for complement component C9, exon 1
1285	15437	26404	10.72	1.0E-42	AF067166.1	NT	Homo sapiens NADH-ubiquinone oxidoreductase AGGG subunit precursor homolog mRNA, nuclear gene encoding mitochondrial protein, complete cds
1285	15437	26405	10.72	1.0E-42	AF067166.1	NT	Homo sapiens NADH-ubiquinone oxidoreductase AGGG subunit precursor homolog mRNA, nuclear gene encoding mitochondrial protein, complete cds
1738	14328	26872	1.86	1.0E-42	11423219	NT	Homo sapiens rec (LOC51201). mRNA
2581	15144	27712	5.25	1.0E-42	5174458	NT	Homo sapiens major histocompatibility complex, class II, DM alpha (HLA-DMA) mRNA
2991	15607	28087	6.58	1.0E-42	4505524	NT	Homo sapiens origin recognition complex, subunit 5 (yeast homolog)-like (ORC5L) mRNA, and translated products
3770	16371	28836	2.85	1.0E-42	7662027	NT	Homo sapiens KIAA0255 gene product (KIAA0255). mRNA
3862	16460	28924	0.83	1.0E-42	5031610	NT	Homo sapiens Gdgl vesicular membrane trafficking protein p18 (BET1) mRNA
3999	16597	29069	1.07	1.0E-42	AL163267.2	NT	Homo sapiens chromosome 21 segment HS21C067
4331	16918	29361	1.92	1.0E-42	AL163280.2	NT	Homo sapiens chromosome 21 segment HS21C080
4697	17279	29725	0.86	1.0E-42	AW813617.1	EST_HUMAN	RC3-ST0197-161099-012-a03 ST0197 Homo sapiens cDNA
4856	17434	29885	2.65	1.0E-42	5803122	NT	Homo sapiens proteasome inhibitor (Pi31). mRNA
4856	17434	29886	2.65	1.0E-42	5803122	NT	Homo sapiens proteasome inhibitor (Pi31). mRNA
4893	17468	29924	6.23	1.0E-42	4506758	NT	Homo sapiens ryanodine receptor 3 (RYR3) mRNA
5274	17835	30260	1.48	1.0E-42	4501912	NT	Homo sapiens a disintegrin and metalloproteinase domain 23 (ADAM23) mRNA

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5274	17835	30281	1.48	1.0E-42	4501912	NT	Homo sapiens a disintegrin and metalloproteinase domain 23 (ADAM23) mRNA
6998	22493	35482	3.35	9.0E-43	4757968	NT	Homo sapiens chromodomain protein, Y chromosome-like (CDYL) mRNA
10916	23435	36455	3.57	9.0E-43	AA435719.1	EST_HUMAN	z779a07.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:728532 3'
680	13304	25786	22.52	8.0E-43	AV736824.1	EST_HUMAN	AV736824 CB Homo sapiens cDNA clone CBLAKH08 5'
680	13304	25787	22.52	8.0E-43	AV736824.1	EST_HUMAN	AV736824 CB Homo sapiens cDNA clone CBLAKH08 5'
729	13349	25841	7.38	8.0E-43	8923276	NT	Homo sapiens hypothetical protein FLJ20297 (FLJ20297). mRNA
729	13349	25842	7.38	8.0E-43	8923276	NT	Homo sapiens hypothetical protein FLJ20297 (FLJ20297). mRNA
729	13349	25843	7.38	8.0E-43	8923276	NT	Homo sapiens hypothetical protein FLJ20297 (FLJ20297). mRNA
6877	18499	31225	0.82	8.0E-43	H13952.1	EST_HUMAN	y08e1.1.1 Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:148172 5'
3703	16304	28772	7.6	7.0E-43	AW246442.1	EST_HUMAN	2822251.Sprime NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2822251 5'
5414	17971	30381	1.1	7.0E-43	AA989045.1	EST_HUMAN	or88a07.s1 NCI_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1602900 3' similar to contains LTR8.63 LTR8 repetitive element.
5414	17971	30382	1.1	7.0E-43	AA989045.1	EST_HUMAN	or88a07.s1 NCI_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1602900 3' similar to contains LTR8.63 LTR8 repetitive element.
8704	21243		3.4	7.0E-43	A1936748.1	EST_HUMAN	wp69b01.x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2466985 3' similar to TR:O15475 O15475 UNNAMED HERV-H PROTEIN ; contains LTR7 b1 LTR7 repetitive element ;
1388	13982		9.98	6.0E-43	AA481890.1	EST_HUMAN	ne72a06.s1 NCI_CGAP_Ew1 Homo sapiens cDNA clone IMAGE:909803 similar to gb:U05095 60S RIBOSOMAL PROTEIN L30 (HUMAN);
2628	15180		2.44	6.0E-43	AV708201.1	EST_HUMAN	AV708201 ADC Homo sapiens cDNA clone ADCACG10 5'
6453	18054	31839	2.54	6.0E-43	9955973	NT	Homo sapiens ATP-binding cassette, sub-family C (CFTR/MRP), member 3 (ABCC3), transcript variant MRP3B, mRNA
6988	19486	32308	2.15	6.0E-43	AW488897.1	EST_HUMAN	hd30b04.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2910991 3' similar to contains MER:1.3 MER1 MER1 repetitive element ;
9765	22283	35246	2.2	6.0E-43	AA195154.1	EST_HUMAN	z35e06.r1 Soares_NHMPu_S1 Homo sapiens cDNA clone IMAGE:665410 5' similar to TR:G528641 G528641 DB1, COMPLETE CDS ; contains element P.T.R7 repetitive element ;
10980	23494		6.53	6.0E-43	AL119158.1	EST_HUMAN	DKFZp761L1712_r1 761 (synonym: hamy2) Homo sapiens cDNA clone DKFZp761L1712 5'
149	12612		1.7	5.0E-43	AL163213.2	NT	Homo sapiens chromosome 21 segment HS21C013
528	13160	25641	3.37	5.0E-43	AA382780.1	EST_HUMAN	EST196033 Testis I Homo sapiens cDNA 5' end
2872	15080	27961	1.18	5.0E-43	AV732578.1	EST_HUMAN	AV732578 HTF Homo sapiens cDNA clone HTFANC06 5'
8447	19481	32302	1.23	5.0E-43	A1613509.1	EST_HUMAN	tw22a07.x1 NCI_CGAP_Bm52 Homo sapiens cDNA clone IMAGE:2260452 3'
6983	19481	32302	0.77	5.0E-43	A1613509.1	EST_HUMAN	tw22a07.x1 NCI_CGAP_Bm52 Homo sapiens cDNA clone IMAGE:2260452 3'
8812	21351		0.49	5.0E-43	H74277.1	EST_HUMAN	y449g12.r1 Soares fetal liver spleen 1NLS Homo sapiens cDNA clone IMAGE:229510 5'
9286	21886	34831	3.67	5.0E-43	AA465288.1	EST_HUMAN	aa33a08.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:815055 5'

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10297	22791	35781	2.17	5.0E-43	AI733244.1	EST_HUMAN	cc52c10.x5 NCL_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1569810 3' similar to TR:P90591 P90591 PV14 GENE.
10332	22826	35821	2.14	5.0E-43	AL049110.1	EST_HUMAN	DKFZp434D0119_r1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434D0119
10844	23176	36188	5.05	5.0E-43	AW863007.1	EST_HUMAN	MR2-SN0007-280400-Q04-Q02 SN0007 Homo sapiens cDNA
10850	23371	36380	4.1	5.0E-43	W29011.1	EST_HUMAN	5564 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA
11332	23030	36039	1.71	5.0E-43	X15804.1	NT	Human mRNA for alpha-actinin
1008	15390	26133	5.38	4.0E-43	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
5464	18099	30417	0.98	4.0E-43	AI056338.1	EST_HUMAN	cy47h03.x1 NCL_CGAP_Brn23 Homo sapiens cDNA clone IMAGE:1669013 3'
6507	19107	31892	0.82	4.0E-43	6896009	NT	Homo sapiens glycyl-RNA synthetase (GARS), mRNA
7184	19716		2.22	4.0E-43	11416793	NT	Homo sapiens protocadherin beta 6 (PCDH6), mRNA
8118	20659	33568	4.54	4.0E-43	AI244341.1	EST_HUMAN	q176a02.x1 NCL_CGAP_Kid3 Homo sapiens cDNA clone IMAGE:1865354 3' similar to contains MER10.13
8118	20659	33569	4.54	4.0E-43	AI244341.1	EST_HUMAN	q176a02.x1 NCL_CGAP_Kid3 Homo sapiens cDNA clone IMAGE:1865354 3' similar to contains MER10.13
10217	22712	35704	1.33	4.0E-43	6005967	NT	MER10 repetitive element.
11184	23689	36736	1.68	4.0E-43	T77380.1	EST_HUMAN	Homo sapiens zinc finger protein 161 (ZNF161), mRNA
11819	24189		4.47	4.0E-43	R20950.1	EST_HUMAN	y072h10.r1 Soares fetal liver spleen 1N1B Homo sapiens cDNA clone IMAGE:113827 5'
							y06b05.r1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:31363 5' similar to contains MER10 repetitive element.
							Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
1255	13852		3.54	3.0E-43	AF223391.1	NT	H. sapiens gene encoding La autoantigen
1733	14324	26866	1.8	3.0E-43	X97869.1	NT	Homo sapiens mRNA for partial phospholipase D1, splice variant PLD1a/b2
2176	14753	27323	1.15	3.0E-43	AJ276230.1	NT	AML1-EVI-1=AML1-EVI-1 fusion protein (rearranged translocation) [human, leukemic cell line SKH1, mRNA Mutant, 5938 nt]
3630	16233	28708	1.25	3.0E-43	S69002.1	NT	nk55d06.s1 NCL_CGAP_P17 Homo sapiens cDNA clone IMAGE:1017419
4378	16965	29411	0.9	3.0E-43	AA548164.1	EST_HUMAN	nk55d06.s1 NCL_CGAP_P17 Homo sapiens cDNA clone IMAGE:1017419
6498	19089	31883	2.08	3.0E-43	7305360	NT	Mus musculus otogelin (Olog), mRNA
6498	19099	31884	2.08	3.0E-43	7305360	NT	Mus musculus otogelin (Olog), mRNA
6827	19417	32233	3.71	3.0E-43	U65487.1	NT	Human ribosomal RNA upstream binding transcription factor (UBTF) gene, partial cds
8104	20645		8.03	3.0E-43	AA458824.1	EST_HUMAN	ae88f11.s1 Stragene fetal retina 937202 Homo sapiens cDNA clone IMAGE:838413 3' similar to contains THR.12 THR repetitive element.
8754	21293	34213	1.59	3.0E-43	7661721	NT	Homo sapiens hypothetical protein (HSA011916), mRNA
9778	22276	35281	0.77	3.0E-43	11420217	NT	Homo sapiens similar to ornithine carbamoyltransferase (H. sapiens) (LOC83648), mRNA
11572	24019	37089	2.6	3.0E-43	5730038	NT	Homo sapiens SET domain and methyltransferase fusion gene (SETMAR) mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
196	12856		9.15	2.0E-43	A190764.1	EST_HUMAN	qd81c09.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1733868 3' similar to contains PTR7.13
6601	19198	32003	0.95	2.0E-43	BE222778.1	EST_HUMAN	PTR7 PTR7 repetitive element ; hu53a08.x1 NCI_CGAP_Brn41 Homo sapiens cDNA clone IMAGE:3173750 3' similar to contains element
6601	19198	32004	0.95	2.0E-43	BE222778.1	EST_HUMAN	MER40 repetitive element ; hu53a08.x1 NCI_CGAP_Brn41 Homo sapiens cDNA clone IMAGE:3173750 3' similar to contains element
7320	19847	32707	1.12	2.0E-43	AW207390.1	EST_HUMAN	MER40 repetitive element ; U1H-B11-ef1-e-09-0-U1 s1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2721712 3'
8250	20781		9.58	2.0E-43	U43701.1	NT	Human ribosomal protein L23a mRNA, complete cds
11079	23591		3.66	2.0E-43	T03007.1	EST_HUMAN	FB1G5 Fetal brain, Stratagene Homo sapiens cDNA clone FB1G5 3' end similar to LINE-1
1690	14282	26817	2.54	1.0E-43	AF154836.1	NT	Homo sapiens Ras-like GTP-binding protein (RAB27A) gene, exons 1b and 2
1690	14282	26818	2.54	1.0E-43	AF154836.1	NT	Homo sapiens Ras-like GTP-binding protein (RAB27A) gene, exons 1b and 2
1743	14333	26879	1.63	1.0E-43	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
2750	15305	27869	4.08	1.0E-43	BF348283.1	EST_HUMAN	602022313F1 NCI_CGAP_Brn67 Homo sapiens cDNA clone IMAGE:4157668 5'
6723	19317	32120	9.22	1.0E-43	4507168	NT	Homo sapiens Sp4 transcription factor (SP4) mRNA
6723	19317	32121	9.22	1.0E-43	4507168	NT	Homo sapiens Sp4 transcription factor (SP4) mRNA
7046	18066	30456	1.8	1.0E-43	R19751.1	EST_HUMAN	y940d1.1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:34732 5' similar to
7873	20415	33323	1.04	1.0E-43	AF175265.1	NT	SP:BD38_MOUSE P28656 BRAIN PROTEIN DN38 ;
8010	20552		2.79	1.0E-43	AF198480.1	NT	Homo sapiens vacuolar sorting protein 35 (VPS35) mRNA, complete cds
8771	21310	34233	26.95	1.0E-43	AW963676.1	EST_HUMAN	Homo sapiens 8q22.1 region and MTG8 (CBFA2T1) gene, partial cds
10191	22686	35679	0.65	1.0E-43	AW953229.1	EST_HUMAN	EST375749 IMAGE resequences, MAGH Homo sapiens cDNA
10843	23364	36380	8.02	1.0E-43	A1984981.1	EST_HUMAN	EST365239 IMAGE resequences, MAGB Homo sapiens cDNA
11244	23774	36831	3.74	1.0E-43	11424378	NT	wf87h01.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2494705 3'
11757	24152		1.95	1.0E-43	AL137964.1	EST_HUMAN	Homo sapiens calcium channel, voltage-dependent, alpha 1E subunit (CACNA1E), mRNA
12054	24337	30698	3.9	1.0E-43	A1675416.1	EST_HUMAN	DKFZp761D1015_r1 761 (synonym: hamy2) Homo sapiens cDNA clone DKFZp761D1015 5'
12286	24488	30842	4.3	9.0E-44	11418322	NT	wb98904.x1 NCI_CGAP_P28 Homo sapiens cDNA clone IMAGE:2313775 3'
923	13536	26054	5.83	8.0E-44	A1222985.1	EST_HUMAN	Homo sapiens cadherin EGF LAG seven-pass G-type receptor 1 (CELSR1), mRNA
923	13538	26055	5.83	8.0E-44	A1222985.1	EST_HUMAN	qh23g01.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1845552 3'
5424	17681	30388	0.69	8.0E-44	A1381520.1	EST_HUMAN	qh23g01.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1845552 3'
8476	21015	33931	2.74	8.0E-44	X64354.1	NT	te76c08.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2082822 3' similar to TR:P83107
11043	23557	36593	3.86	8.0E-44	Y10498.2	NT	H. sapiens DNA for Cone cGMP-PDE gene
11536	23984	37056	1.88	8.0E-44	L29139.1	NT	Homo sapiens myosin mRNA, partial cds
12008	24310	30982	2.76	8.0E-44	11527398	NT	Homo sapiens polymerase (RNA) II (DNA directed) polypeptide F (POLR2F), mRNA

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Table 4
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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12419	24859	30703	2.39	8.0E-44	11418099	NT	Homo sapiens protein kinase C, alpha binding protein (PRKCABP), mRNA
687	13311		0.83	7.0E-44	R06035.1	EST_HUMAN	ye89a0.1.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:124920 5'
2276	14850	27428	1.12	7.0E-44	5031886	NT	Homo sapiens LIM domain-containing preferred translocation partner in lipoma (LPP) mRNA
2993	15609	28088	2.84	7.0E-44	AF048729.1	NT	Homo sapiens minisatellite ms32 repeat region
2993	15609	28089	2.84	7.0E-44	AF048729.1	NT	Homo sapiens minisatellite ms32 repeat region
3929	16527	28984	2.76	7.0E-44	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
4326	16912	29354	0.96	7.0E-44	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
4326	16912	29355	0.96	7.0E-44	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
8126	20667	33576	6.38	7.0E-44	AU159839.1	EST_HUMAN	AU159839 Y79AA1 Homo sapiens cDNA clone Y79AA1000496 3'
6252	18861	31633	0.77	6.0E-44	Z20948.1	EST_HUMAN	HSAAADEYU P, Human foetal Brain Whole tissue Homo sapiens cDNA
11611	24054	37118	2.92	6.0E-44	AW954050.1	EST_HUMAN	EST366120 IMAGE resequences, MAGC Homo sapiens cDNA
325	12978		3.12	5.0E-44	AJ269880.1	NT	Homo sapiens KIAA0851 gene (partial), XT3 gene and LZTFL1 gene
354	13003		1.75	5.0E-44	AJ269880.1	NT	Homo sapiens KIAA0851 gene (partial), XT3 gene and LZTFL1 gene
7829	20371	33278	3.5	5.0E-44	AI568523.1	EST_HUMAN	tn40402.x1 NCI CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2170083 3' similar to contains OFR.11
9306	21906		1.85	5.0E-44	AU124571.1	EST_HUMAN	OFR OFR repetitive element;
3461	18068	28541	2.18	4.0E-44	AL163303.2	NT	AU124571 NT2RM4 Homo sapiens cDNA clone NT2RM4000218 5'
5158	17727		1.16	4.0E-44	AI435225.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C103
8215	20756	33670	0.76	4.0E-44	L21848.1	NT	Human fibrillin (FBN1) locus polymorphism
8811	21350		0.54	4.0E-44	BE178618.1	EST_HUMAN	RC3-HT0585-010400-023-008 HT0585 Homo sapiens cDNA
11117	23626	36668	7.04	4.0E-44	U90878.1	NT	Homo sapiens carboxyl terminal LIM domain protein (CLIM1) mRNA, complete cds
1821	14410		1.09	3.0E-44	8912477	NT	Homo sapiens karyopherin alpha 6 (importin alpha 7) (KPNAG), mRNA
3132	15746	28215	5.8	3.0E-44	AA169851.1	EST_HUMAN	zp18005.r1 Stratagene fetal retina 937202 Homo sapiens cDNA clone IMAGE:609777 5'
3959	16557	29028	2.94	3.0E-44	AA337234.1	EST_HUMAN	EST42299 Endometrial tumor Homo sapiens cDNA 5' and similar to similar to alpha-1-antitrypsinase F
5404	17962	30373	2.57	3.0E-44	BF691060.1	EST_HUMAN	602247109.F1 NIH_MGC_62 Homo sapiens cDNA clone IMAGE:4332195 5'
9438	21864	34913	0.56	3.0E-44	AF005273.1	NT	Sus scrofa domestica submaxillary apomucin mRNA, complete cds
1087	13692	26201	2.13	2.0E-44	4826685	NT	Homo sapiens DEADH (Asp-Glu-Ala-Asp/His) box polypeptide 1 (DDX1) mRNA
1087	13692	26202	2.13	2.0E-44	4826685	NT	Homo sapiens DEADH (Asp-Glu-Ala-Asp/His) box polypeptide 1 (DDX1) mRNA
1249	13846	26363	2.99	2.0E-44	5803200	NT	Homo sapiens transmembrane trafficking protein (TMP21), mRNA
1249	13846	26364	2.99	2.0E-44	5803200	NT	Homo sapiens transmembrane trafficking protein (TMP21), mRNA
1355	13849	26475	4.41	2.0E-44	AF133588.1	NT	Homo sapiens RAB36 (RAB36) mRNA, complete cds
1412	14005	26533	1.38	2.0E-44	BE465325.1	EST_HUMAN	hw14g06.x1 NCI CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3182838 3' similar to SW:OXYB_HUMAN P22059 OXYSTEROL-BINDING PROTEIN. ;

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2196	14772	27346	1.71	2.0E-44	AF070651.1	NT	Homo sapiens tissue-type bone marrow zinc finger protein 4 mRNA, complete cds
2841	15200		2.07	2.0E-44	5901933	NT	Homo sapiens adaptor-related protein complex 4, sigma 1 subunit (CLAPS4), mRNA
3517	16122	28602	1.34	2.0E-44	D97875.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
4689	17251	29703	1.88	2.0E-44	AW884379.1	EST_HUMAN	PMA-SN0016-120500-003-a04 SN0016 Homo sapiens cDNA
5441	17896	30401	1.08	2.0E-44	4506378	NT	Homo sapiens mitogen-activated protein kinase kinase kinase 3 (MAP4K3), mRNA
6245	18854	31625	1.71	2.0E-44	11449901	NT	Homo sapiens chemokine (C-C motif) receptor 9 (CCR9), mRNA
6941	18049	30471	1.05	2.0E-44	AF038988.1	NT	Homo sapiens general transcription factor 2-1 (GTF2) mRNA, alternatively spliced product, complete cds
7444	19968	32835	4.03	2.0E-44	11419228	NT	Homo sapiens glutamate receptor, metabotropic 3 (GRM3), mRNA
7444	19968	32836	4.03	2.0E-44	11419228	NT	Homo sapiens glutamate receptor, metabotropic 3 (GRM3), mRNA
8367	20907	33825	0.85	2.0E-44	7706370	NT	Homo sapiens vesicle transport-related protein (KIAA0917), mRNA
8367	20907	33826	0.85	2.0E-44	7706370	NT	Homo sapiens vesicle transport-related protein (KIAA0917), mRNA
8554	21093	34013	1.47	2.0E-44	BE389058.1	EST_HUMAN	601286914F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3613586 5'
11657	24084		1.8	2.0E-44	BE244902.1	EST_HUMAN	TCBAP1E2795 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP2795
12608	24692		63.7	2.0E-44	11526283	NT	Homo sapiens cat eye syndrome chromosome region, candidate 1 (CECR1), mRNA
56	12736	25205	5.03	1.0E-44	7657334	NT	Homo sapiens Misshapen/NIK-related kinase (MINK), mRNA
56	12736	25206	5.03	1.0E-44	7657334	NT	Homo sapiens Misshapen/NIK-related kinase (MINK), mRNA
606	13234	25708	2.28	1.0E-44	AW853132.1	EST_HUMAN	RC1-CT0249-030300-026-M2 CT0249 Homo sapiens cDNA
1239	13637		1.03	1.0E-44	AW994803.1	EST_HUMAN	RC1-BN0039-110300-012-b01 BN0039 Homo sapiens cDNA
1918	14211		4.77	1.0E-44	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
2266	14840	27416	3.03	1.0E-44	AA434554.1	EST_HUMAN	zw53d02.r1 Soares_total_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:773763 5' similar to contains THR13 THR repetitive element;
2266	14840	27417	3.03	1.0E-44	AA434554.1	EST_HUMAN	zw53d02.r1 Soares_total_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:773763 5' similar to contains THR13 THR repetitive element;
2321	15463	27468	1.21	1.0E-44	AA398098.1	EST_HUMAN	z88g11.r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:729476 5'
2788	15341	27911	1.54	1.0E-44	AF196779.1	NT	Homo sapiens transcription factor (GHM enhancer 3, JM11 protein, JM4 protein, JM5 protein, T54 protein, JM10 protein, A4 differentiation-dependent protein, triple LIM domain protein 6, and synaptophysin genes, complete cds; and L-type calcium channel α 2
3788	16388		4.07	1.0E-44	AA455689.1	EST_HUMAN	aa01c09.s1 Soares_NhMMPu_S1 Homo sapiens cDNA clone IMAGE:811984 3'
8209	20750	33663	1.33	1.0E-44	AW987073.1	EST_HUMAN	EST379147 MAGe resequences, MAGJ Homo sapiens cDNA
8209	20750	33664	1.33	1.0E-44	AW987073.1	EST_HUMAN	EST379147 MAGe resequences, MAGJ Homo sapiens cDNA
8560	21119	34040	0.94	1.0E-44	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
8956	21494	34417	0.68	1.0E-44	AI337183.1	EST_HUMAN	qx88g07.x1 NCI_CGAP_GC06 Homo sapiens cDNA clone IMAGE:2009628 3'

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10892	23413		11.29	1.0E-44	AV714608.1	EST_HUMAN	AV714608 DCB Homo sapiens cDNA clone DCBBYE03 5'
11404	23855	36921	5.07	1.0E-44	10092064	NT	Homo sapiens Sushi domain (SCR repeat) containing (BK95A6.2), mRNA
11460	23910	36976	3.83	1.0E-44	AW846967.1	EST_HUMAN	RC1-CT0198-150999-011-C08 CT0198 Homo sapiens cDNA
11460	23910	36977	3.83	1.0E-44	AW846967.1	EST_HUMAN	RC1-CT0198-150999-011-C08 CT0198 Homo sapiens cDNA
4678	17260	29711	1.31	9.0E-45	8922391	NT	Homo sapiens hypothetical protein FLJ10379 (FLJ10379), mRNA
4678	17260	29712	1.31	9.0E-45	8922391	NT	Homo sapiens hypothetical protein FLJ10379 (FLJ10379), mRNA
6757	19350	32159	1.34	9.0E-45	AB023212.1	NT	Homo sapiens mRNA for KIAA0995 protein, partial cds
2565	15128	27688	6.45	8.0E-45	5174718	NT	Homo sapiens TRK-fused gene (NOTE: non-standard symbol and name) (TFG) mRNA
5241	17805	30228	7.14	8.0E-45	5174718	NT	Homo sapiens TRK-fused gene (NOTE: non-standard symbol and name) (TFG) mRNA
8051	20593	33501	0.84	8.0E-45	AA37985.1	EST_HUMAN	EST90983 Synovial sarcoma Homo sapiens cDNA 5' end
2884	15600		0.99	7.0E-45	AL160131.1	NT	Novel human gene mapping to chromosome 22
4050	16647		6.39	6.0E-45	AW157570.1	EST_HUMAN	au83h07.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2782909 3' similar to
12385	25063		2	6.0E-45	11418213	NT	SW:R13A_HUMAN P40429 60S RIBOSOMAL PROTEIN L13A ;
825	13538		1.34	5.0E-45	AL163203.2	NT	Homo sapiens ADP-ribosylation factor GTPase activating protein 1 (ARFGAP1), mRNA
2045	14627	27196	12.03	5.0E-45	BF333827.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C003
3246	15858	28341	2.25	5.0E-45	A1523766.1	EST_HUMAN	GM4-CN0044-180200-515-101 CN0044 Homo sapiens cDNA
5703	18329	30832	8.34	5.0E-45	AA397781.1	EST_HUMAN	tg84f07.x1 NCL CGAP CLL1 Homo sapiens cDNA clone IMAGE:2116453 3' similar to SW:PAX1_MOUSE
6170	18762	31548	1.1	5.0E-45	Y18933.1	NT	z172d03.s1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:727877 3' similar to contains element
6170	18762	31549	1.1	5.0E-45	Y18933.1	NT	TAR1 repetitive element ;
6215	18825	31596	1.15	5.0E-45	AB022318.1	NT	Homo sapiens MCP-1 gene and enhancer region
6215	18825	31597	1.15	5.0E-45	AB022318.1	NT	Homo sapiens MCP-1 gene and enhancer region
6336	18942	31720	1.82	5.0E-45	11496268	NT	Homo sapiens mRNA for inducible nitric oxide synthase, complete cds
6336	18942	31721	1.82	5.0E-45	11496268	NT	Homo sapiens mRNA for inducible nitric oxide synthase, complete cds
8218	20759	33673	0.51	5.0E-45	11418704	NT	Homo sapiens zinc finger protein 277 (ZNF277), mRNA
8971	21509	34431	1.79	5.0E-45	4759223	NT	Homo sapiens zinc finger protein 277 (ZNF277), mRNA
11542	23990	37062	2.52	5.0E-45	8923698	NT	Homo sapiens bone morphogenetic protein 5 (BMP5), mRNA
1183	13784	26294	11.57	4.0E-45	X95826.1	NT	Homo sapiens programmed cell death 5 (PDCD5), mRNA
2330	14901	27472	21.18	4.0E-45	BE265622.1	EST_HUMAN	Homo sapiens golgin-like protein (GLP), mRNA
4605	17188	29635	0.88	4.0E-45			H. sapiens ART4 gene
							60119440F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3538425 5'
							Homo sapiens TRAF family member-associated NFKB activator (TANK) mRNA
							nc28607.s1 NCL CGAP_P1 Homo sapiens cDNA clone IMAGE:1009284 similar to contains element L1
8888	21424		0.86	4.0E-45	AA226220.1	EST_HUMAN	repetitive element ;

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11629	24071		2.17	4.0E-45	BE044076.1	EST_HUMAN	hcd3h04.x1 NCI_CGAP_U11 Homo sapiens cDNA clone IMAGE:3039511 3' similar to contains MER29.b3
11673	25006	30613	1.66	4.0E-45	11435947	NT	MER29 repetitive element;
12278	24482		2.14	4.0E-45	BF676077.1	EST_HUMAN	Homo sapiens chromosome 12 open reading frame 3 (C12ORF3), mRNA
4161	15982		1.32	3.0E-45	171480.1	EST_HUMAN	602084052F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4248253 5'
6383	18987	31767	1.29	3.0E-45	6753651	NT	yc35f07.r1 Soares fetal liver spleen 1NFS Homo sapiens cDNA clone IMAGE:110245 5'
6383	18987	31768	1.29	3.0E-45	6753651	NT	Mus musculus dynein, axon, heavy chain 11 (Dnahc11), mRNA
8388	20928		1.29	3.0E-45	AV723976.1	EST_HUMAN	Mus musculus dynein, axon, heavy chain 11 (Dnahc11), mRNA
8726	21265	34185	3.78	3.0E-45	4758451	NT	AV723976 HTB Homo sapiens cDNA clone HTBAAG01 5'
10209	22704	35696	11.34	3.0E-45	AL163227.2	NT	Homo sapiens golgi autoantigen, golgin subfamily a, 2 (GOLGA2) mRNA
10209	22704	35697	11.34	3.0E-45	AL163227.2	NT	Homo sapiens chromosome 21 segment HS21C027
2547	15111		4.13	2.0E-45	AL163218.2	NT	Homo sapiens chromosome 21 segment HS21C018
3067	15682	28154	0.89	2.0E-45	AJ243213.1	NT	Homo sapiens partial 5-HT4 receptor gene, exons 2 to 5
6644	19240	32043	5.48	2.0E-45	L01865.1	NT	Human eosinophil Charcot-Leyden crystal (GLC) protein (lysophospholipase) gene, promoter and exon 1
7605	20118	32994	1.35	2.0E-45	BE782184.1	EST_HUMAN	601467783F1 NIH_MGC_87 Homo sapiens cDNA clone IMAGE:3870838 5'
8354	20894	33815	0.75	2.0E-45	AW834834.1	EST_HUMAN	RCO-LT0001-150200-032-d11 LT0001 Homo sapiens cDNA
10682	24798	36225	28.86	2.0E-45	BE934350.1	EST_HUMAN	MRO-HT0923-190800-201-a02 HT0923 Homo sapiens cDNA
11055	23587	36603	5.39	2.0E-45	AA458770.1	EST_HUMAN	aa87f12.r1 Stratiene fetal retina 837202 Homo sapiens cDNA clone IMAGE:838319 5' similar to
11378	23830	36892	2.33	2.0E-45	AW270280.1	EST_HUMAN	TR:G1144589 G1144589 R-SLY1.;
11378	23830	36893	2.33	2.0E-45	AW270280.1	EST_HUMAN	xp72a03.x1 NCI_CGAP_Ov40 Homo sapiens cDNA clone IMAGE:2745888 3'
12548	24653		2.42	2.0E-45	11418157	NT	xp72a03.x1 NCI_CGAP_Ov40 Homo sapiens cDNA clone IMAGE:2745888 3'
129	13067		2.71	1.0E-45	BE389855.1	EST_HUMAN	Homo sapiens calcium channel, voltage-dependent, alpha 1i subunit (CAGNA1i), mRNA
434	13067		3.24	1.0E-45	BE389855.1	EST_HUMAN	Homo sapiens chromosome 44 Homo sapiens cDNA clone IMAGE:3606183 5'
488	13130	25619	1.61	1.0E-45	4506412	NT	601284360F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3606183 5'
1218	13816	26331	1.54	1.0E-45	7657290	NT	Homo sapiens RAP1A, member of RAS oncogene family (RAP1A), mRNA
3137	15751	28219	10.2	1.0E-45	U32169.1	NT	Homo sapiens Langerhans cell specific c-type lectin (LANGERIN), mRNA
3339	16144	28627	0.88	1.0E-45	8659558	NT	Homo sapiens chromosome 21 open reading frame 1 (C21orf4), mRNA
3632	16235	28710	0.68	1.0E-45	AB046811.1	NT	Homo sapiens pro-a2 chain of collagen type XI (COL11A2) gene, complete cds
4575	17158	28602	5.67	1.0E-45	BE396633.1	EST_HUMAN	Homo sapiens chromosome 21 open reading frame 1 (C21orf4), mRNA
5335	17896	30311	11.79	1.0E-45	7706128	NT	Homo sapiens mRNA for KIAA1591 protein, partial cds
7974	20516	33422	0.71	1.0E-45	11422236	NT	601289116F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3618803 5'
7974	20516	33423	0.71	1.0E-45	11422236	NT	Homo sapiens oxysterol 7alpha-hydroxylase (CYP39A1), mRNA
							Homo sapiens peroxisomal biogenesis factor 14 (PEX14), mRNA
							Homo sapiens peroxisomal biogenesis factor 14 (PEX14), mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8543	21082	34003	0.88	1.0E-45	D87875.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
9049	21586	34517	4.07	1.0E-45	BE887843.1	EST_HUMAN	601511226F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3912535 5'
9441	21987	34916	0.96	1.0E-45	AB002287.1	NT	Human mRNA for KIAA0289 gene, partial cds
11875	24225	31045	4.89	1.0E-45	11418099	NT	Homo sapiens protein kinase C, alpha binding protein (PRKCABP), mRNA
12063	24346		9.84	1.0E-45	11526291	NT	Homo sapiens hypothetical protein FLJ20454 (FLJ20454), mRNA
12068	24349		10.36	1.0E-45	11418177	NT	Homo sapiens Ran GTPase activating protein 1 (RANGAP1), mRNA
12513	24632	30895	3.46	1.0E-45	11418157	NT	Homo sapiens calcium channel, voltage-dependent, alpha 1I subunit (CACNA1I), mRNA
8170	20711	33628	1.87	9.0E-46	9910283	NT	Mus musculus keratin complex 2, gene 6g (Krl2-6g), mRNA
8569	21108		6.51	9.0E-46	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
10374	22868	35681	10.22	9.0E-46	AW246964.1	EST_HUMAN	2822449 SpHrime NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2822449 5'
2486	15051	27622	9.69	8.0E-46	A1433261.1	EST_HUMAN	TUBULIN BETA-1 CHAIN (HUMAN);
2486	15051	27623	9.69	8.0E-46	A1433261.1	EST_HUMAN	TUBULIN BETA-1 CHAIN (HUMAN);
7998	20540		6.07	8.0E-46	BE167244.1	EST_HUMAN	TUBULIN BETA-1 CHAIN (HUMAN);
11513	23961		2.67	8.0E-46	11419729	NT	Homo sapiens ribosomal protein L44 (RPL44), mRNA
2280	14854	27432	1.07	7.0E-46	U46007.1	NT	Rattus norvegicus espin mRNA, complete cds
4880	17262		6.38	7.0E-46	BE386165.1	EST_HUMAN	601277292F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3618119 5'
4929	17504		0.96	7.0E-46	BE064366.1	EST_HUMAN	RC4-BT0310-110300-015-10 BT0310 Homo sapiens cDNA
6193	18803	31572	3.72	7.0E-46	8922708	NT	Homo sapiens hypothetical protein FLJ10847 (FLJ10847), mRNA
6620	19217	32022	1.29	7.0E-46	BF105845.1	EST_HUMAN	601822835F1 NIH_MGC_77 Homo sapiens cDNA clone IMAGE:4042736 5'
12203	24428		1.6	7.0E-46	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
2763	15336	27906	3.13	6.0E-46	A1884381.1	EST_HUMAN	WM31108.x1 NCI_CGAP_U14 Homo sapiens cDNA clone IMAGE:2437575 3' similar to contains MER19.12
2763	15336	27907	3.13	6.0E-46	A1884381.1	EST_HUMAN	WM31108.x1 NCI_CGAP_U14 Homo sapiens cDNA clone IMAGE:2437575 3' similar to contains MER19.12
6278	18886	31655	9.32	6.0E-46	A1635448.1	EST_HUMAN	ts58h10.x1 NCI_CGAP_Kic8 Homo sapiens cDNA clone IMAGE:2232835 3' similar to TR:O60363 O60363
7269	19797	32853	0.83	6.0E-46	AW513244.1	EST_HUMAN	xc42s04.x1 NCI_CGAP_U11 Homo sapiens cDNA clone IMAGE:2706654 3' similar to gb.L08089 DNABJ
11268	23006		2.81	6.0E-46	BE784971.1	EST_HUMAN	PROTEIN HOMOLOG 2 (HUMAN);
218	12879		5.85	5.0E-46	AL163210.2	NT	601478409F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3880995 5'
3581	16185	28687	1.37	5.0E-46	BE677194.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C010
3581	16185	28688	1.37	5.0E-46	BE677194.1	EST_HUMAN	7d81g01.x1 Lupski_dorsal_root_ganglion Homo sapiens cDNA clone IMAGE:3279408 3'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6833	19423	32239	1.83	5.0E-46	BF590442.1	EST_HUMAN	nae38f07.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3258757 3' similar to TR:O75202
7021	19555	32380	3.81	5.0E-46	BF347229.1	EST_HUMAN	O75202 HOMOLOG OF RAT KIDNEY-SPECIFIC ;
7152	19884	32528	0.74	5.0E-46	AW592253.1	EST_HUMAN	802021184F1 NCI_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4156670 5'
9533	22033	34892	0.46	5.0E-46	AA398381.1	EST_HUMAN	QV4-ST0212-120100-075-709 ST0212 Homo sapiens cDNA
							z62c08.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:728928 3'
							nc54e09.s1 NCI_CGAP_SS1 Homo sapiens cDNA clone IMAGE:1104520 3' similar to gb:X53741_ma1
669	13293		1.73	4.0E-46	AA601143.1	EST_HUMAN	FIBULIN-1, ISOFORM A PRECURSOR (HUMAN);
							hi86c03.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3008836 3' similar to gb:X14008_ma1
1741	14331	26875	3.98	4.0E-46	AW770544.1	EST_HUMAN	LYSOZYME C PRECURSOR (HUMAN); contains element MER37 repetitive element ;
							hi86c03.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3008836 3' similar to gb:X14008_ma1
1741	14331	26876	3.98	4.0E-46	AW770544.1	EST_HUMAN	LYSOZYME C PRECURSOR (HUMAN); contains element MER37 repetitive element ;
2767	15221	27887	3.11	4.0E-46	M18048.1	NT	Human endogenous retrovirus RTV(L-H2
5628	18257	30727	2.09	4.0E-46	M38852.1	NT	Human Ig germline gamma-3 heavy-chain gene V region, partial cds
5628	18257	30728	2.09	4.0E-46	M38852.1	NT	Human Ig germline gamma-3 heavy-chain gene V region, partial cds
12332	24516	30921	1.86	4.0E-46	AB002059.1	NT	Homo sapiens DNA for Human P2XM, complete cds
4482	17087	29517	0.81	3.0E-46	4506378	NT	Homo sapiens mitogen-activated protein kinase kinase kinase 3 (MAP4K3), mRNA
							hi86c03.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3008836 3' similar to gb:X14008_ma1
4889	17464	28918	0.98	3.0E-46	Z73660.1	NT	H. sapiens Ig lambda light chain variable region gene (7c.11.2) germline; Ig-Light-Lambda; VLambda
							hi86c03.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3008836 3' similar to gb:X14008_ma1
4889	17464	29919	0.98	3.0E-46	Z73660.1	NT	H. sapiens Ig lambda light chain variable region gene (7c.11.2) germline; Ig-Light-Lambda; VLambda
8684	21223	34143	7.65	3.0E-46	A1831492.1	EST_HUMAN	vj49c04.x1 NCI_CGAP_Lu19 Homo sapiens cDNA clone IMAGE:2408150 3' similar to contains THR.b2
8935	21473	34392	0.58	3.0E-46	L08850.1	NT	THR repetitive element ;
8935	21473	34393	0.56	3.0E-46	L08850.1	NT	Human AD amyloid mRNA, complete cds
11446	23696	36981	3.14	3.0E-46	D31785.1	NT	Human AD amyloid mRNA, complete cds
							hi86c03.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3008836 3' similar to gb:X14008_ma1
870	13485	26000	8.24	2.0E-46	AA468646.1	EST_HUMAN	Human mRNA for KIAA0061 gene, partial cds
1808	14201		1.41	2.0E-46	AA678246.1	EST_HUMAN	ne06a09.s1 NCI_CGAP_Co3 Homo sapiens cDNA clone IMAGE:880408 3' similar to contains THR.b2 THR
							repetitive element ;
							z127a11.s1 Soares_fetal_liver_spleen_1NF1.S_S1 Homo sapiens cDNA clone IMAGE:431996 3'
1883	14275	26808	2.17	2.0E-46	U78027.1	NT	Homo sapiens Bruton's tyrosine kinase (BTK), alpha-D-galactosidase A (GLA), L44-like ribosomal protein
							(L44L) and FTP3 (FTP3) genes, complete cds
							z159e02.r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:726650 5' similar to SW:RSP1_MOUSE
5110	17682	30119	1.2	2.0E-46	AA398288.1	EST_HUMAN	Q01730 RSP-1 PROTEIN ;

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Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7497	20020	32884	6.85	2.0E-46	9910569	NT	Mus musculus sperm tail associated protein (Stap), mRNA
8014	20556		1.81	2.0E-46	BE869151.1	EST_HUMAN	601445137F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3849297 5'
11125	23633		1.56	2.0E-46	7657233	NT	Homo sapiens small acidic protein (IMAGE145052), mRNA
11802	24963		1.74	2.0E-46	BF028854.1	EST_HUMAN	601765225F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3997326 5'
12094	24381		1.43	2.0E-46	AA001786.1	EST_HUMAN	zh84f12.r1 Soares_Tetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:428015 5'
12408	24848	30800	5.26	2.0E-46	AW27214.1	EST_HUMAN	xs78h03.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:2756789 3'
1276	13871	26391	5.79	1.0E-46	4502894	NT	Homo sapiens cell division cycle 10 (homologous to CDC10 of S. cerevisiae) (CDC10) mRNA
2320	14892	27487	4.58	1.0E-46	AW978516.1	EST_HUMAN	EST390625 MAGC resequences, MAGP Homo sapiens cDNA
2443	15010	27582	2.81	1.0E-46	H97330.1	EST_HUMAN	EST48b095 WATM1 Homo sapiens cDNA clone 48b095
3286	15897	28375	22.33	1.0E-46	AA631912.1	EST_HUMAN	np78b02.s1 NCI_CGAP_Pr2 Homo sapiens cDNA clone IMAGE:1132395 similar to gb:X76717 H.sapiens
4999	17572		3.21	1.0E-46	AB023197.1	NT	MT-11 mRNA. (HUMAN);
5878	18500	31226	11.77	1.0E-46	BF194707.1	EST_HUMAN	Homo sapiens mRNA for KIAA0980 protein, partial cds
6131	24757	31500	4.79	1.0E-46	8923762	NT	7692b01.x1 NCI_CGAP_Ov18 Homo sapiens cDNA clone IMAGE:3843705 3'
6131	24757	31501	4.79	1.0E-46	8923762	NT	Homo sapiens centaurin-alpha 2 protein (HSA272195), mRNA
6725	19319	32124	0.72	1.0E-46	BF196247.1	EST_HUMAN	Homo sapiens centaurin-alpha 2 protein (HSA272195), mRNA
10742	18500	31226	4.43	1.0E-46	BF194707.1	EST_HUMAN	7n48b07.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3567852 3' similar to contains element
11831	24196	31035	1.97	1.0E-46	BF531102.1	EST_HUMAN	MER22 repetitive element.
11831	24196	31036	1.97	1.0E-46	BF531102.1	EST_HUMAN	7692b01.x1 NCI_CGAP_Ov18 Homo sapiens cDNA clone IMAGE:3843705 3'
12826	24704		1.39	1.0E-46	AV715377.1	EST_HUMAN	602072264F1 NCI_CGAP_Brn67 Homo sapiens cDNA clone IMAGE:4215398 5'
798	13415		3.52	9.0E-47	AJ271735.1	NT	602072264F1 NCI_CGAP_Brn67 Homo sapiens cDNA clone IMAGE:4215398 5'
5065	17638	30081	2.39	9.0E-47	AW770928.1	EST_HUMAN	AV715377 DOB Homo sapiens cDNA clone DOBAIE03 5'
6514	19114	31903	0.78	9.0E-47	11425439	NT	Homo sapiens Xq pseudautosomal region, segment 1/2
12355	24951	30627	3.64	9.0E-47	11417966	NT	h93e04.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3009534 3' similar to TR:075703 075703
1844	14432	26985	16.42	8.0E-47	Y18536.1	NT	HYPOTHETICAL 12.4 KD PROTEIN. ;
1844	14432	26986	16.42	8.0E-47	Y18536.1	NT	Homo sapiens zinc finger protein ZNF288 (ZNF288), mRNA
2742	15297	27864	1.1	8.0E-47	5453955	NT	Homo sapiens SEC14 (S. cerevisiae)-like 2 (SEC14L2), mRNA
3058	15674	28150	2.05	8.0E-47	AJ228043.1	NT	Homo sapiens HLA-C gene, exon 5, individual 19323
3686	16287	28756	0.8	8.0E-47	AB041926.1	NT	Homo sapiens HLA-C gene, exon 5, individual 19323
3686	16287	28757	0.8	8.0E-47	AB041926.1	NT	Homo sapiens protein phosphatase 2, regulatory subunit B (B56), epsilon isoform (PPP2R5E) mRNA
12436	24845		1.55	7.0E-47	AV683284.1	EST_HUMAN	Homo sapiens 959 kb contig between AML1 and CBR1 on chromosome 21q22, segment 3/3

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9200	21717	34661	6.33	6.0E-47	AI685189.1	EST_HUMAN	t298h02.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2296659 3'
9828	22128	35091	0.69	6.0E-47	AB042824.1	NT	Homo sapiens RECQL5 beta mRNA for DNA helicase recQ5 beta, complete cds
9828	22128	35092	0.69	6.0E-47	AB042824.1	NT	Homo sapiens RECQL5 beta mRNA for DNA helicase recQ5 beta, complete cds
6691	19287	32090	5.97	5.0E-47	11423972	NT	Homo sapiens CDC37 (cell division cycle 37, S. cerevisiae homolog) (CDC37), mRNA
10874	23206		4.92	5.0E-47	MT8590.1	EST_HUMAN	EST00738 Fetal brain, Striatum (cat#936206) Homo sapiens cDNA clone HFBCE07
1445	14037	28567	3.92	4.0E-47	4557558	NT	Homo sapiens E1A binding protein p300 (EP300) mRNA
6920	19579	32408	0.94	4.0E-47	BE938896.1	EST_HUMAN	MR4-TN0108-280800-201-404 TN0108 Homo sapiens cDNA
8417	20957	33874	2.47	4.0E-47	BE616483.1	EST_HUMAN	601280486F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3622437 5'
8417	20957	33875	2.47	4.0E-47	BE616483.1	EST_HUMAN	601280486F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3622437 5'
8553	21092	34012	0.57	4.0E-47	AW983777.1	EST_HUMAN	RC3-BN0034-220300-015-105 BN0034 Homo sapiens cDNA
11494	23943		6.19	4.0E-47	AW515509.1	EST_HUMAN	x66607.x1 NCI_CGAP_Lym12 Homo sapiens cDNA clone IMAGE:2848597 3' similar to SW:INT6_MOUSE
570	13201	25682	3.11	3.0E-47	BE807634.1	EST_HUMAN	Q64252 VIRAL INTEGRATION SITE PROTEIN INT-6, [1]
570	13201	25683	3.11	3.0E-47	BE807634.1	EST_HUMAN	601497639F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3889721 5'
851	13487	25976	5.09	3.0E-47	N57483.1	EST_HUMAN	601497639F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3889721 5'
981	13593	26108	9.88	3.0E-47	AL163284.2	NT	y54604.s1 Soares multiple sclerosis 2NBMSP Homo sapiens cDNA clone IMAGE:277327 3'
3343	15953	28429	0.77	3.0E-47	4504116	NT	Homo sapiens chromosome 21 segment HS21C084
4038	16636		5.04	3.0E-47	U93181.1	NT	Homo sapiens glutamate receptor, ionotropic, kainate 1 (GRIK1) mRNA
6163	18776	31538	4.81	3.0E-47	AW408800.1	EST_HUMAN	UI-HF-BM0-act-d-07-0-UJ.r1 NIH_MGC_38 Homo sapiens cDNA clone IMAGE:3063205 5'
6163	18776	31539	4.81	3.0E-47	AW408800.1	EST_HUMAN	UI-HF-BM0-act-d-07-0-UJ.r1 NIH_MGC_38 Homo sapiens cDNA clone IMAGE:3063205 5'
6880	19276		1.71	3.0E-47	AI222413.1	EST_HUMAN	qh04e07.x1 Soares NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1843716 3'
7416	19941	32806	0.75	3.0E-47	AI819755.1	EST_HUMAN	wj11h08.x1 NCI_CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2402559 3'
7416	19941	32807	0.75	3.0E-47	AI819755.1	EST_HUMAN	wj11h08.x1 NCI_CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2402559 3'
8767	21306	34228	0.56	3.0E-47	AW963796.1	EST_HUMAN	EST375869 MAGI2 resequences, MAGH Homo sapiens cDNA
8767	21306	34229	0.56	3.0E-47	AW963796.1	EST_HUMAN	EST375869 MAGI2 resequences, MAGH Homo sapiens cDNA
159	12822	26310	1.38	2.0E-47	4505318	NT	Homo sapiens myosin phosphatase, target subunit 2 (MYPT2), mRNA
1003	13614	26127	2.14	2.0E-47	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
1003	13614	26128	2.14	2.0E-47	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
1613	14206		1.1	2.0E-47	AI969279.1	EST_HUMAN	w98802.x1 NCI_CGAP_GC6 Homo sapiens cDNA clone IMAGE:2479851 3'
1637	14229	28762	1.07	2.0E-47	7682109	NT	Homo sapiens KIAA0426 gene product (KIAA0426), mRNA
1717	14309	28848	3.75	2.0E-47	AA525414.1	EST_HUMAN	ng43h12.s1 NCI_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937607 3'
4439	17025	29465	1.88	2.0E-47	4504866	NT	Homo sapiens rRNA (28S) (28S), rRNA
4473	17059	29506	1.91	2.0E-47	AA569592.1	EST_HUMAN	rf23g07.s1 NCI_CGAP_P1 Homo sapiens cDNA clone IMAGE:914652
4473	17059	29507	1.91	2.0E-47	AA569592.1	EST_HUMAN	rf23g07.s1 NCI_CGAP_P1 Homo sapiens cDNA clone IMAGE:914652

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4604	17187	28634	2.94	2.0E-47	5174648	NT	Homo sapiens Rev/Rex activation domain binding protein-related (RAB-R) mRNA
4935	17510	28957	1.26	2.0E-47	AW965196.1	EST_HUMAN	EST377239 MAGE resequences, MAGI Homo sapiens cDNA
5956	18578	31312	0.93	2.0E-47	AF073921.1	NT	Homo sapiens regulator of G-protein signaling 8 variant form (RGS6) mRNA, complete cds
6130	18745	31498	1.46	2.0E-47	BE778475.1	EST_HUMAN	601463932F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3867487 5'
6130	18745	31499	1.46	2.0E-47	BE778475.1	EST_HUMAN	601463932F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3867487 5'
7686	24788		1.25	2.0E-47	U09731.1	NT	Homo sapiens 5-hydroxytryptamine 1D receptor pseudogene with an Alu repeat insertion
7905	20447	33353	1.74	2.0E-47	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
7905	20447	33354	1.74	2.0E-47	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
8652	21191	34109	1.77	2.0E-47	AF071771.1	NT	Homo sapiens SPH-binding factor mRNA, partial cds
9410	21919	34867	1.33	2.0E-47	11526136	NT	Homo sapiens BTG family, member 3 (BTG3), mRNA
11863	24994	30608	2.82	2.0E-47	R42423.1	EST_HUMAN	yf92008.s1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:29966 3' similar to contains OFR repetitive element
1451	14043	28571	6.05	1.0E-47	A1333429.1	EST_HUMAN	qp99h03.x1 Soares_fetal_lung_NHL19W Homo sapiens cDNA clone IMAGE:1931189 3'
3894	16493	28953	0.93	1.0E-47	BE280477.1	EST_HUMAN	601155321F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3138893 5'
3894	16493	28954	0.93	1.0E-47	BE280477.1	EST_HUMAN	601155321F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3138893 5'
5235	17799	30218	2.44	1.0E-47	AW813906.1	EST_HUMAN	RC3-ST0197-130400-017-h02 ST0197 Homo sapiens cDNA
7109	19449	32265	5.56	1.0E-47	A1880886.1	EST_HUMAN	at19a06.x1 Barstead aorta HPLRB6 Homo sapiens cDNA clone IMAGE:2355586 3' similar to gb:M22995
8802	21341		7.88	1.0E-47	AW684648.1	EST_HUMAN	RAS-RELATED PROTEIN RAP-1A (HUMAN); h184a11.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2978972 3' similar to gb:M26326
10258	22753	35741	2.06	1.0E-47	L30115.1	NT	KERATIN, TYPE I CYTOSKELETAL 18 (HUMAN); P apio hamediyas alcohol dehydrogenase class I (ADH) gene, 5' region
1654	14246	29779	2.38	9.0E-48	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
3812	16215	28695	0.78	9.0E-48	BF359947.1	EST_HUMAN	CM2-MIT0100-310700-290-705 MT0100 Homo sapiens cDNA
5860	18482	31205	0.83	9.0E-48	BE888196.1	EST_HUMAN	601511714F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3913106 5'
5860	18482	31206	0.83	9.0E-48	BE888196.1	EST_HUMAN	601511714F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3913106 5'
6373	18977	31755	0.89	9.0E-48	AU123240.1	EST_HUMAN	AU123240 NT2RM1 Homo sapiens cDNA clone NT2RM1000978 5'
10995	23509	36542	3.37	9.0E-48	BE363813.1	EST_HUMAN	601310479F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3632083 5'
1293	13888		2.34	8.0E-48	4501900	NT	Homo sapiens aminocyclase 1 (ACY1), mRNA
1294	13888		1.76	8.0E-48	4501900	NT	Homo sapiens aminocyclase 1 (ACY1), mRNA
3169	15783	28254	3.3	8.0E-48	AW769477.1	EST_HUMAN	h181b03.x1 NCL CGAP_Lym12 Homo sapiens cDNA clone IMAGE:3001133 3' similar to gb:X64707 BREAST BASIC CONSERVED PROTEIN 1 (HUMAN);
3169	15783	28255	3.3	8.0E-48	AW769477.1	EST_HUMAN	h181b03.x1 NCL CGAP_Lym12 Homo sapiens cDNA clone IMAGE:3001133 3' similar to gb:X64707 BREAST BASIC CONSERVED PROTEIN 1 (HUMAN);

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4005	16603	29077	0.6	8.0E-48	4504116	NT	Homo sapiens glutamate receptor, ionotropic, kainate 1 (GRIK1) mRNA
516	13149		2.03	7.0E-48	AB033035.1	NT	Homo sapiens mRNA for KIAA1209 protein, partial cds
517	13149		20.88	7.0E-48	AB033035.1	NT	Homo sapiens mRNA for KIAA1209 protein, partial cds
1544	14136	26670	1.08	7.0E-48	6912719	NT	Homo sapiens tussled-like kinase 1 (TLK1) mRNA
1679	14271	26804	3.49	7.0E-48	5730038	NT	Homo sapiens SET domain and mariner transposase fusion gene (SETMAR) mRNA
6672	19268	32072	21.95	7.0E-48	11416831	NT	Homo sapiens histidyl-tRNA synthetase (HARS), mRNA
3658	16261	28733	1.19	6.0E-48	AI761111.1	EST_HUMAN	w69h03.x1 NCJ_CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2398613 3'
6208	18818	31589	0.98	6.0E-48	AB006955.1	NT	Homo sapiens mRNA for AIE-75, complete cds
6881	19815	32450	0.87	6.0E-48	11420995	NT	Homo sapiens BMX non-receptor tyrosine kinase (BMX), mRNA
9051	21588	34520	2.17	6.0E-48	AF026816.1	NT	Homo sapiens putative oncogene protein mRNA, partial cds
9460	21986	34940	1.72	6.0E-48	11427428	NT	Homo sapiens hypothetical protein FLJ11008 (FLJ11008), mRNA
9606	22106	35069	3.5	6.0E-48	AA189080.1	EST_HUMAN	Zq45008.s1 Stragene hNT neuron (#837233) Homo sapiens cDNA clone IMAGE:632827 3' similar to contains Alu repetitive element;
2293	14867	27442	1.43	5.0E-48	4827059	NT	Homo sapiens xylulokinase (H. influenzae) homolog (XYLB) mRNA
2300	14873	27449	1.15	5.0E-48	4827059	NT	Homo sapiens xylulokinase (H. influenzae) homolog (XYLB) mRNA
3350	18002	28435	1.64	5.0E-48	4928891	NT	Homo sapiens phosphodiesterase 1A, calmodulin-dependent (PDE1A) mRNA
5418	17975	30383	1.13	5.0E-48	AF219038.1	NT	Homo sapiens diacylglycerol kinase iota (DGKI) gene, exon 32
8511	21050	33972	6.84	5.0E-48	BE064410.1	EST_HUMAN	RC4-BT0311-141196-011-h08 BT0311 Homo sapiens cDNA
10836	23357	36373	4.24	4.0E-48	AI620420.1	EST_HUMAN	tu47a02.x1 NCJ_CGAP_P128 Homo sapiens cDNA clone IMAGE:2254154 3'
1428	14021	26549	1.75	3.0E-48	AV690964.1	EST_HUMAN	AV690964 GKC Homo sapiens cDNA clone GKCDRE12 5'
2019	14601	27165	9.63	3.0E-48	4885170	NT	Homo sapiens chromosome X open reading frame 6 (CXORF6) mRNA
2019	14601	27166	9.63	3.0E-48	4885170	NT	Homo sapiens chromosome X open reading frame 6 (CXORF6) mRNA
3465	16072	28545	0.98	3.0E-48	AF172453.1	NT	Homo sapiens opioid growth factor receptor mRNA, complete cds
3693	16294	28764	0.76	3.0E-48	AW684531.1	EST_HUMAN	hi14b12.x1 NCJ_CGAP_GU1 Homo sapiens cDNA clone IMAGE:2972255 3' similar to SW:DCRB_HUMAN
4332	16919		0.67	3.0E-48	AA009541.1	EST_HUMAN	P56555 DOWN SYNDROME CRITICAL REGION PROTEIN B. ;
6053	18871	31410	2.98	3.0E-48	BE084571.1	EST_HUMAN	204g03.r1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:426844 5'
7087	19658	32497	1.01	3.0E-48	AF087913.1	NT	MR4-BT0657-060400-201-a10 BT0657 Homo sapiens cDNA
8330	20871		3.02	3.0E-48	AA659930.1	EST_HUMAN	Human endogenous retrovirus HERV-P-T47D
10753	23277	36290	6.32	3.0E-48	BF514170.1	EST_HUMAN	nv0305.s1 NCJ_CGAP_P122 Homo sapiens cDNA clone IMAGE:1219137 3' similar to contains PTR5.b1 PTR5 repetitive element ;
5	12685	25142	2.18	2.0E-48	AA465007.1	EST_HUMAN	UIH-BW1-ant-a-10-0-UI.s1 NCJ_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3082287 3'
49	12726	25193	2.12	2.0E-48	AA631940.1	EST_HUMAN	z680c03.r1 Soares ovary tumor NHOt Homo sapiens cDNA clone IMAGE:910052 5'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4629	17212	29963	0.93	2.0E-48	BE246065.1	EST_HUMAN	TCBAP1D3842 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP3842
5095	17668	30107	1.8	2.0E-48	T03176.1	EST_HUMAN	FB2E2 Fetal brain, Strategene Homo sapiens cDNA clone FB2E2 3'end
5095	17668	30108	1.8	2.0E-48	T03176.1	EST_HUMAN	FB2E2 Fetal brain, Strategene Homo sapiens cDNA clone FB2E2 3'end
7528	20048	32919	4.15	2.0E-48	AB040934.1	NT	Homo sapiens mRNA for KIAA1501 protein, partial cds
7528	20048	32920	4.15	2.0E-48	AB040934.1	NT	Homo sapiens mRNA for KIAA1501 protein, partial cds
7539	20059	32933	3.51	2.0E-48	11498238	NT	Homo sapiens v-rel avian reticuloendotheliosis viral oncogene homolog A (nuclear factor of kappa light polypeptide gene enhancer in B-cells 3 (p65)) (REL), mRNA
8296	20837	33758	1.53	2.0E-48	AV743451.1	EST_HUMAN	AV743451 CB Homo sapiens cDNA clone CBCCGG10 5'
11828	12885	25142	4.4	2.0E-48	AA465007.1	EST_HUMAN	z880c03.1 Soares ovary tumor NBH0T Homo sapiens cDNA clone IMAGE:810052 5'
60	12739	25210	3.22	1.0E-48	7706534	NT	Homo sapiens clathrin resistance-associated overexpressed protein (LOC51747), mRNA
906	13520	26038	5.3	1.0E-48	4502168	NT	Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA
1114	13718	26228	2.58	1.0E-48	7657430	NT	Homo sapiens EBNA-2 co-activator (p100), mRNA
1114	13718	26229	2.58	1.0E-48	7657430	NT	Homo sapiens EBNA-2 co-activator (p100), mRNA
1339	13934	26455	4.33	1.0E-48	5032032	NT	Homo sapiens RNA binding motif protein 6 (RBM6), mRNA
1982	14548	27103	19.18	1.0E-48	AL163302.2	NT	Homo sapiens chromosome 21 segment HS21C102
3535	16140	28622	0.81	1.0E-48	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
5312	17874	30286	1.37	1.0E-48	M10976.1	NT	Human endogenous retroviral DNA (4-1), complete proviral segment
6431	19034	31818	1.14	1.0E-48	A1889077.1	EST_HUMAN	Id17c01.x1 NCI_CGAP_Cot8 Homo sapiens cDNA clone IMAGE:2075904 3' similar to TR:O14588 O14588 SIMILARITY TO U73941.
6431	19034	31819	1.14	1.0E-48	A1889077.1	EST_HUMAN	Id17c01.x1 NCI_CGAP_Cot16 Homo sapiens cDNA clone IMAGE:2075904 3' similar to TR:O14588 O14588 SIMILARITY TO U73941.
6825	19222		0.94	1.0E-48	Y18000.1	NT	Homo sapiens NF2 gene
7303	19831	32690	2.58	1.0E-48	4755137	NT	Homo sapiens huntingtin (Huntington disease) (HD), mRNA
8765	21304	34225	0.52	1.0E-48	4759695	NT	Homo sapiens mitogen-activated protein kinase kinase 13 (MAP3K13), mRNA
8765	21304	34226	0.52	1.0E-48	4759695	NT	Homo sapiens mitogen-activated protein kinase kinase 13 (MAP3K13), mRNA
9140	21675	34618	0.84	1.0E-48	4502838	NT	Homo sapiens Chediak-Higashi syndrome 1 (CHS1), mRNA
9192	21709	34653	6	1.0E-48	AB033071.1	NT	Homo sapiens mRNA for KIAA1245 protein, partial cds
9485	21942	34889	0.73	1.0E-48	BE168410.1	EST_HUMAN	QV34-H70513-080400-147-401 HT0513 Homo sapiens cDNA
9502	22002	34959	3.86	1.0E-48	BF304683.1	EST_HUMAN	60188096F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4122119 5'
10272	22767	35754	3.54	1.0E-48	11429808	NT	Homo sapiens B cell linker protein (SLP65), mRNA
10272	22767	35755	3.54	1.0E-48	11429808	NT	Homo sapiens B cell linker protein (SLP65), mRNA
11789	24937		1.62	1.0E-48	W26785.1	EST_HUMAN	15d6 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2052	14633	27204	0.96	8.0E-49	AB026497.1	NT	Mus musculus MysPDZ mRNA for myosin containing PDZ domain, complete cds
6204	18814	31584	3.44	8.0E-49	10048417	NT	Mus musculus T-box 20 (Tbx20), mRNA
6204	18814	31585	3.44	8.0E-49	10048417	NT	Mus musculus T-box 20 (Tbx20), mRNA
8236	20777	33698	3.22	8.0E-49	U23850.1	NT	Human inositol 1,4,5 trisphosphate receptor type 1 mRNA, partial cds
9900	22397	35372	1.23	8.0E-49	AB008681.1	NT	Homo sapiens gene for activin receptor type IIB, complete cds
10736	23261	36276	1.8	8.0E-49	AI823722.1	EST_HUMAN	ts38d12.x1 NCL_CGAP_U4 Homo sapiens cDNA clone IMAGE:2230871 3' similar to contains Alu repetitive element; contains element PTRS repetitive element;
145	13032	25542	2.62	7.0E-49	5728990	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, ATPase, 4 (PSMC4) mRNA
145	13032	25542	2.62	7.0E-49	5728990	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, ATPase, 4 (PSMC4) mRNA
417	13032	25543	2.38	7.0E-49	5728990	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, ATPase, 4 (PSMC4) mRNA
417	13032	25543	2.38	7.0E-49	5728990	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, ATPase, 4 (PSMC4) mRNA
418	13032	25542	2.59	7.0E-49	5728990	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, ATPase, 4 (PSMC4) mRNA
418	13032	25543	2.59	7.0E-49	5728990	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, ATPase, 4 (PSMC4) mRNA
1263	13860	26377	3.49	7.0E-49	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
5651	18278	30755	1.97	7.0E-49	AI807191.1	EST_HUMAN	wf25h04.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2356663 3' similar to TR:O54923
5661	18288	30766	1.11	7.0E-49	AL120937.1	EST_HUMAN	O54923 RSEC15. ;
5973	18278	30755	1.14	7.0E-49	AI807191.1	EST_HUMAN	DKFZp762C033_s1 762 (synonym: hmel2) Homo sapiens cDNA clone DKFZp762C033 3'
211	12872	25356	57.13	6.0E-49	AW731740.1	EST_HUMAN	wf25h04.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2356663 3' similar to TR:O54923
4193	18782	29231	0.59	6.0E-49	AL162091.1	EST_HUMAN	O54923 RSEC15. ;
6571	19169	31968	0.69	6.0E-49	AU140742.1	EST_HUMAN	ba55g05.x1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:2900504 3' similar to gb:X17208 40S RIBOSOMAL PROTEIN S4 (HUMAN); gb:M20632 Mouse LLRep3 protein mRNA from a repetitive element, complete (MOUSE);
11159	23666	36711	3.66	6.0E-49	AW452218.1	EST_HUMAN	DKFZp761A138_s1 761 (synonym: hamy2) Homo sapiens cDNA clone DKFZp761A138 3'
11514	23962	37031	3.9	6.0E-49	AA366556.1	EST_HUMAN	AU140742 PLACE4 Homo sapiens cDNA clone PLACE4000148 5'
11514	23962	37032	3.9	6.0E-49	AA366556.1	EST_HUMAN	UIH-B13-alc-a-05-0.U1.s1 NCL_CGAP_Sub5 Homo sapiens cDNA clone IMAGE:3068048 3'
12166	24825	25854	7.5	6.0E-49	AA707567.1	EST_HUMAN	EST177525 Pancreas tumor III Homo sapiens cDNA 5' end
741	13361	25854	6.61	5.0E-49	AL163210.2	NT	EST177525 Pancreas tumor III Homo sapiens cDNA 5' end
741	13361	25855	6.61	5.0E-49	AL163210.2	NT	z126d08.s1 Soares_feial_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:451694 3'
741	13361	25855	6.61	5.0E-49	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
1830	14419	26868	3.16	5.0E-49	AA172121.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C010
2778	15331	27800	4.95	5.0E-49	U17714.1	NT	zp29c07.r1 Stralagene neuroepithelium (4937231) Homo sapiens cDNA clone IMAGE:610860 5' similar to TR:G233226 G233226 RTV_L-H PROTEIN; contains LTR7.3 LTR7 LTR7 repetitive element;
							Homo sapiens putative tumor suppressor ST13 (ST13) mRNA, complete cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3311	15922	28398	6.09	5.0E-49	11436355	NT	Homo sapiens similar to ribosomal protein S27 (metalloproteininulin 1) (H. sapiens) (LOC83362), mRNA
551	13182	25659	26.48	4.0E-49	AW189533.1	EST_HUMAN	x08b01.x1 NCI_CGAP_U14 Homo sapiens cDNA clone IMAGE:2675593 3' similar to WP:B0350.2B
7316	19843	32704	0.79	4.0E-49	11525737	NT	Homo sapiens UDP-N-acetyl-alpha-D-galactosamine polypeptide N-acetylgalactosaminyltransferase 8
7316	19843	32705	0.79	4.0E-49	11525737	NT	(GalNAc-T8) (GALNT8), mRNA
8798	21337	34263	0.46	4.0E-49	11425374	NT	Homo sapiens UDP-N-acetyl-alpha-D-galactosamine polypeptide N-acetylgalactosaminyltransferase 8
8798	21337	34264	0.46	4.0E-49	11425374	NT	(GalNAc-T8) (GALNT8), mRNA
12021	25055		4.9	4.0E-49	AA210798.1	EST_HUMAN	Homo sapiens copine III (CPNE3), mRNA
12110	24371		3.14	4.0E-49	AF240786.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1)
586	13216	25693	1.08	3.0E-49	X68998.1	NT	genes, complete cds
2674	15232		1.43	3.0E-49	AA016131.1	EST_HUMAN	H. sapiens mRNA for acetyl-CoA carboxylase
5120	17692	30130	2.33	3.0E-49	U46999.1	NT	z831c05.r1 Soares retina N2b4HR Homo sapiens cDNA clone IMAGE:360584 5' similar to contains L1.13 L1
7448	19872	32939	9.89	3.0E-49	H39479.1	EST_HUMAN	repetitive element ;
11181	23887	36734	1.98	3.0E-49	AA337561.1	EST_HUMAN	Human type IV collagen (COL4A6) gene, exon 40
689	13313		1.57	2.0E-49	BE165980.1	EST_HUMAN	EST25612 WATM1 Homo sapiens cDNA clone 25e12
3259	15871	28351	1.3	2.0E-49	N26446.1	EST_HUMAN	EST42672 Endometrial tumor Homo sapiens cDNA 5' end
3627	16230	28706	0.67	2.0E-49	AF026564.1	NT	MR3-HT0487-150200-113-g01 HT0487 Homo sapiens cDNA
							yc23d08.r1 Soares melanocyte 2NBHM Homo sapiens cDNA clone IMAGE:262571 5'
							Homo sapiens RNA binding protein II (RBMII) gene, complete cds
							oz88402.x1 Soares, senescent_fibroblasts_NbHSF Homo sapiens cDNA clone IMAGE:1882403 3' similar to
4918	17493	29945	0.67	2.0E-49	AI167357.1	EST_HUMAN	gb:IM31470 RAS-LIKE PROTEIN TC10 (HUMAN); contains Alu repetitive element; contains element MER22
4932	17507	29954	0.61	2.0E-49	BF511846.1	EST_HUMAN	UI-H-B14-aps-d-02-0-UJ.st NCI_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3088538 3'
6834	19424	32240	1.13	2.0E-49	AV717938.1	EST_HUMAN	AV717938 DCB Homo sapiens cDNA clone DCBALB01 5'
8043	20585		1.71	2.0E-49	M86033.1	EST_HUMAN	EST02558 Fetal brain, Stratagene (cat#936206) Homo sapiens cDNA clone HFBCY50
12121	24929		1.81	2.0E-49	AF163864.1	NT	Homo sapiens SNCA isoform (SNCA) gene, complete cds, alternatively spliced
932	13545		9.12	1.0E-49	BF035327.1	EST_HUMAN	Homo sapiens SNCA isoform (SNCA) gene, complete cds, alternatively spliced
1600	14192	28723	14.26	1.0E-49	4557887	NT	601458331F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3862086 5'
1837	14425	28976	4.07	1.0E-49	BE255216.1	EST_HUMAN	Homo sapiens keratin 18 (KRT18) mRNA
5562	18193	30940	8.31	1.0E-49	BF131007.1	EST_HUMAN	601115769F1 NIH_MGC_18 Homo sapiens cDNA clone IMAGE:3358273 5'
							601820053F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:4052052 5'

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6228	18837	31610	0.95	1.0E-49	H18291.1	EST_HUMAN	yn48h04.r1 Soares adult brain N265H185Y Homo sapiens cDNA clone IMAGE:171703 5' similar to SP:GBG1_HUMAN Q08447 GUANINE NUCLEOTIDE-BINDING PROTEIN G(T) GAMMA-1 SUBUNIT ;
6234	18843	31615	0.94	1.0E-49	AW984640.1	EST_HUMAN	EST1376713 MAGC resequences; MAGH Homo sapiens cDNA
7275	19803	32661	3.31	1.0E-49	BE398110.1	EST_HUMAN	601290330F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3620863 5'
7275	19803	32662	3.31	1.0E-49	BE398110.1	EST_HUMAN	601290330F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3620863 5'
7342	19889	32733	2.3	1.0E-49	N25884.1	EST_HUMAN	yn78g12.s1 Soares placenta_8tc6weeks_2NbpP8tc9W Homo sapiens cDNA clone IMAGE:258408 3' similar to gb:X65873 KINESIN HEAVY CHAIN (HUMAN);
7342	19889	32734	2.3	1.0E-49	N25884.1	EST_HUMAN	yn78g12.s1 Soares placenta_8tc6weeks_2NbpP8tc9W Homo sapiens cDNA clone IMAGE:258408 3' similar to gb:X65873 KINESIN HEAVY CHAIN (HUMAN);
8023	20565	33467	1.23	1.0E-49	11321580	NT	Homo sapiens succinate-CoA ligase, GDP-forming, alpha subunit (SUCLG1), mRNA
8023	20565	33468	1.23	1.0E-49	11321580	NT	Homo sapiens succinate-CoA ligase, GDP-forming, alpha subunit (SUCLG1), mRNA
8609	21148		0.93	1.0E-49	9894184	NT	Homo sapiens RNA binding motif protein 7 (LOC51120), mRNA
8923	21481	34378	1.26	1.0E-49	BE409340.1	EST_HUMAN	601300982F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3633398 5'
10033	22528	35523	1.26	1.0E-49	AL043129.2	EST_HUMAN	DKFZp434D2423_t1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434D2423 5'
10927	23445	36466	2.28	1.0E-49	AV751477.1	EST_HUMAN	AV751477 NP0 Homo sapiens cDNA clone NPDAWE04 5'
11190	23695	36744	3.48	1.0E-49	11427388	NT	Homo sapiens brefeldin A-inhibited guanine nucleotide-exchange protein 1 (BIG1), mRNA
11653	24081		1.39	1.0E-49	BE158343.1	EST_HUMAN	MRO-H10407-010200-006-f02 HT0407 Homo sapiens cDNA
12015	24314		2.46	1.0E-49	11418322	NT	Homo sapiens cadherin EGF LAG seven-pass G-type receptor 1 (CELSR1), mRNA
6536	25117		0.88	9.0E-50	BE295758.1	EST_HUMAN	601176250F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3531588 5'
181	12843	25327	2.91	8.0E-50	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
748	13368	25862	1.7	8.0E-50	X95097.2	NT	Homo sapiens mRNA for VIP receptor 2
748	13368	25863	1.7	8.0E-50	X95097.2	NT	Homo sapiens mRNA for VIP receptor 2
1070	13675		6.61	8.0E-50	AF000573.1	NT	Homo sapiens homogenisate 1,2-dioxygenase gene, complete cds
1800	14390	26935	2.81	8.0E-50	4501890	NT	Homo sapiens actinin, alpha 1 (ACTN1), mRNA
2522	15086	27658	1	8.0E-50	7706394	NT	Homo sapiens p47 (LOC51674), mRNA
2522	15086	27659	1	8.0E-50	7706394	NT	Homo sapiens p47 (LOC51674), mRNA
2723	15278	27845	0.98	8.0E-50	4828658	NT	Homo sapiens capping protein (actin filament) muscle Z-line, beta (CAPZB), mRNA
4182	16772	29221	0.99	8.0E-50	AL163281.2	NT	Homo sapiens chromosome 21 segment HS21C081
647	13270	25748	0.97	7.0E-50	BE089591.1	EST_HUMAN	QVO-B10703-280400-211-e08 BT0703 Homo sapiens cDNA
6880	19614	32448	0.94	7.0E-50	BF091922.1	EST_HUMAN	RC8-TN0073-150900-011-A12 TN0073 Homo sapiens cDNA
6880	19614	32448	0.94	7.0E-50	BF091922.1	EST_HUMAN	RC8-TN0073-150900-011-A12 TN0073 Homo sapiens cDNA
7346	18872	32738	1.25	7.0E-50	AA627822.1	EST_HUMAN	ng59a12.s1 NCI_CGAP_C09 Homo sapiens cDNA clone IMAGE:1148206 3' similar to gb:X68391 60S
10638	23168	38179	22.7	7.0E-50	AI872137.1	EST_HUMAN	wm55g11.x1 NCI_CGAP_U12 Homo sapiens cDNA clone IMAGE:2439808 3'

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4435	17021		0.82	6.0E-50	BE794381.1	EST_HUMAN	601589565F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3943577 5'
8155	20696		6.9	6.0E-50	BE044076.1	EST_HUMAN	h036h04.x1 NCI_CGAP_U01 Homo sapiens cDNA clone IMAGE:3039511 3' similar to contains MER29 b3
10694	23224	36237	5.53	6.0E-50	AA312079.1	EST_HUMAN	MER29 repetitive element;
10694	23224	36238	5.53	6.0E-50	AA312079.1	EST_HUMAN	EST182775 Jurkat T-cells VI Homo sapiens cDNA 5' end
1829	14418	26966	0.98	5.0E-50	BF332938.1	EST_HUMAN	CM0-BT0792-300500-398-b05 BT0792 Homo sapiens cDNA
1829	14418	26967	0.98	5.0E-50	BF332938.1	EST_HUMAN	CM0-BT0792-300500-398-b05 BT0792 Homo sapiens cDNA
9022	21559		4.85	5.0E-50	AA557683.1	EST_HUMAN	n145h10.s1 NCI_CGAP_P14 Homo sapiens cDNA clone IMAGE:1043683 similar to contains PTR5 b3 PTR5 repetitive element;
11619	24061	37125	1.57	5.0E-50	AA403053.1	EST_HUMAN	z62b01.1 Scores_NHT Homo sapiens cDNA clone IMAGE:726889 5' similar to TR:G1335769 G1335769 GAG-POL POLYPROTEIN.;
950	13562		1.74	4.0E-50	AA601143.1	EST_HUMAN	nc64e09.s1 NCI_CGAP_SS1 Homo sapiens cDNA clone IMAGE:1104520 3' similar to gb:X53741_ma1
7285	19813	32869	1.04	4.0E-50	BE087536.1	EST_HUMAN	FIBULIN-1, ISOFORM A PRECURSOR (HUMAN);
1982	14565		2.4	3.0E-50	M18048.1	NT	QV1-BT0681-280300-127-f12 BT0681 Homo sapiens cDNA
3338	15948	28424	0.78	3.0E-50	AA746142.1	EST_HUMAN	Human endogenous retrovirus RTVL-H2
3815	16415	28979	0.93	3.0E-50	AW755254.1	EST_HUMAN	cd03f08.s1 NCI_CGAP_Kid3 Homo sapiens cDNA clone IMAGE:1322627 3'
6862	19596	32427	1.45	3.0E-50	11421514	NT	CMYA5 Human cardiac muscle expression library Homo sapiens cDNA clone 4151935 similar to CMYA5 Cardiomyopathy associated gene 5
7640	20152	33036	4.41	3.0E-50	AF233436.2	NT	Homo sapiens similar to sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3A (H. sapiens) (LOC63232), mRNA
7640	20152	33037	4.41	3.0E-50	AF233436.2	NT	Homo sapiens FYVE domain-containing dual specificity protein phosphatase FYVE-DSP1a mRNA, complete cds
8518	21057	33980	0.73	3.0E-50	6607589	NT	Homo sapiens FYVE domain-containing dual specificity protein phosphatase FYVE-DSP1a mRNA, complete cds
9732	22230	35207	1.32	3.0E-50	AB046818.1	NT	Homo sapiens ankyrin-like with transmembrane domains 1 (ANKTM1), mRNA
9741	22239	35220	0.98	3.0E-50	11418514	NT	Homo sapiens mRNA for KIAA1598 protein, partial cds
10412	22806	35903	0.67	3.0E-50	AB002297.1	NT	Homo sapiens t-complex 10 (a murine top homolog) (TCP10), mRNA
10981	23495	36524	1.78	3.0E-50	11438955	NT	Human mRNA for KIAA0298 gene, partial cds
11339	23037	36046	5.96	3.0E-50	AJ245621.1	NT	Homo sapiens Grib2-associated binder 2 (KIAA0571), mRNA
810	13427		9.28	2.0E-50	AF055066.1	NT	Homo sapiens CTL2 gene
1118	13721	26233	4.82	2.0E-50	4557752	NT	Homo sapiens MHC class 1 region
1492	14084	26625	3.56	2.0E-50	AF138303.1	NT	Homo sapiens midline 1 (Opitz/BBB syndrome) (MID1) mRNA
3328	15936	28412	0.61	2.0E-50	AF111168.2	NT	Homo sapiens decorin D mRNA, complete cds, alternatively spliced
						NT	Homo sapiens serine palmitoyl transferase, subunit II gene, complete cds; and unknown genes

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4347	16934	29375	0.6	2.0E-50	D68424.1	NT	Mus musculus mRNA for high-sulfur keratin protein, partial cds
8258	20798	33716	1.24	2.0E-50	AB038162.1	NT	Homo sapiens TFF gene cluster for trefol factor, complete cds
8258	20798	33717	1.24	2.0E-50	AB038162.1	NT	Homo sapiens TFF gene cluster for trefol factor, complete cds
8393	20833	33854	9.32	2.0E-50	X06956.1	NT	Human HALPHIA44 gene for alpha-tubulin, exons 1-3
8393	20833	33855	9.32	2.0E-50	X06956.1	NT	Human HALPHIA44 gene for alpha-tubulin, exons 1-3
9769	22287	35281	2.89	2.0E-50	9910293	NT	Mus musculus keratin complex 2, gene 6g (Krt2-6g), mRNA
9789	22297	35282	2.89	2.0E-50	9910293	NT	Mus musculus keratin complex 2, gene 6g (Krt2-6g), mRNA
11512	23860		2.09	2.0E-50	AF023861.1	NT	Macaca mulatta cyclophilin A mRNA, complete cds
487	13120	25606	1.58	1.0E-50	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
2403	14971		6.87	1.0E-50	AJ171735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
10085	22590	35583	0.77	1.0E-50	D11078.1	NT	Homo sapiens RGH2 gene, retrovirus-like element
6138	18750	31507	0.89	9.0E-51	AW511225.1	EST_HUMAN	hd44602.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2912378 3' similar to TR:Q95636
6372	18976	31754	0.69	9.0E-51	AA744837.1	EST_HUMAN	O96636 CAMP-REGULATED GUANINE NUCLEOTIDE EXCHANGE FACTOR II.;
8608	21145	34060	0.7	9.0E-51	AI791154.1	EST_HUMAN	hy87h03.x1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1283381 3'
9248	21774	34725	1.16	9.0E-51	AA043738.1	EST_HUMAN	ab23g04.x5 Strategene lung (#837210) Homo sapiens cDNA clone IMAGE:841686 3' similar to SW:PSM_HUMAN_Q04609 PROSTATE-SPECIFIC MEMBRANE ANTIGEN ;
							zk51c09.r1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:486352 5'
9420	21929	34875	0.52	9.0E-51	AI791154.1	EST_HUMAN	ab23g04.x5 Strategene lung (#837210) Homo sapiens cDNA clone IMAGE:841686 3' similar to SW:PSM_HUMAN_Q04609 PROSTATE-SPECIFIC MEMBRANE ANTIGEN ;
9420	21929	34878	0.52	9.0E-51	AI791154.1	EST_HUMAN	ab23g04.x5 Strategene lung (#837210) Homo sapiens cDNA clone IMAGE:841686 3' similar to SW:PSM_HUMAN_Q04609 PROSTATE-SPECIFIC MEMBRANE ANTIGEN ;
4532	17116	29561	2.81	8.0E-51	4503932	NT	Homo sapiens glycine amidinotransferase (L-arginine:glycine amidinotransferase) (GATM) mRNA
4532	17116	29562	2.81	8.0E-51	4503932	NT	Homo sapiens glycine amidinotransferase (L-arginine:glycine amidinotransferase) (GATM) mRNA
4687	17249	29702	13.1	8.0E-51	AA610842.1	EST_HUMAN	np89e09.s1 NCI_CGAP_Lu1 Homo sapiens cDNA clone IMAGE:1142440 3' similar to gb:X12671_rna1 HETEROGENEOUS NUCLEAR RIBONUCLEOPROTEIN A1 (HUMAN);
5319	17881	30300	1.68	8.0E-51	AF092132.1	NT	Homo sapiens PAK2 mRNA, complete cds
7648	20160	33047	2.06	8.0E-51	11439587	NT	Homo sapiens PDZ-73 protein (PDZ-73NY-CO-38), mRNA
9385	21808		0.99	8.0E-51	AU138590.1	EST_HUMAN	HU138590 PLACE1 Homo sapiens cDNA clone PLACE1008887 5'
3051	15987	28145	0.72	7.0E-51	AW274720.1	EST_HUMAN	xr34e03.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2695564 3' similar to TR:Q92340
3321	15831	28408	1.51	7.0E-51	AW889219.1	EST_HUMAN	Q92340 ATYPICAL PKC SPECIFIC BINDING PROTEIN.;
3408	16017	28496	0.76	7.0E-51	AW274720.1	EST_HUMAN	xr34e03.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2695564 3' similar to TR:Q92340
4247	16835	29286	2.14	7.0E-51	AL079628.1	EST_HUMAN	Q92340 ATYPICAL PKC SPECIFIC BINDING PROTEIN.;
							DKFZp434B2229_r1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434B2229 5'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4247	16835	29287	2.14	7.0E-51	AL079628.1	EST_HUMAN	DKFZp434B2228_r1.434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434B2228 5'
4443	17029	29469	1.89	7.0E-51	AW295603.1	EST_HUMAN	U1-H.BW0-aiip-b-05-0-J1.s1 NC1_CGAP_Sub6 Homo sapiens cDNA clone IMAGE:2729817 3'
11534	23982	37053	1.95	7.0E-51	AF161449.1	NT	Homo sapiens HSPC331 mRNA, partial cds
1575	14168	26699	17.84	6.0E-51	6678763	NT	Homo sapiens putative DNA binding protein (M96), mRNA
2022	14804	27169	5.19	6.0E-51	7657266	NT	Homo sapiens KIAA0929 protein Mxx2 interacting nuclear target (MINT) homolog (KIAA0929), mRNA
3520	16125	28605	17.1	6.0E-51	7657266	NT	Homo sapiens KIAA0929 protein Mxx2 interacting nuclear target (MINT) homolog (KIAA0929), mRNA
4397	16982	29426	1.09	6.0E-51	9910553	NT	Homo sapiens solute carrier family 2 (facilitated glucose transporter), member 9 (SLC2A9), mRNA
4397	16982	29427	1.09	6.0E-51	9910553	NT	Homo sapiens solute carrier family 2 (facilitated glucose transporter), member 9 (SLC2A9), mRNA
6142	18756	31514	57.08	6.0E-51	X01788.1	NT	Human haptoglobin related (Hpr) gene exon 3
6152	18765	31527	11.76	6.0E-51	AF070083.1	NT	Homo sapiens mitogen-activated protein kinase kinase 1 (MKK4) gene, exon 4
6152	18765	31528	11.76	6.0E-51	AF070083.1	NT	Homo sapiens mitogen-activated protein kinase kinase 1 (MKK4) gene, exon 4
6858	19592	32424	1.05	6.0E-51	4508738	NT	Homo sapiens ribosomal protein S6 kinase, 70kD, polypeptide 1 (RPS6KB1) mRNA
6972	19549	32373	0.71	6.0E-51	11418751	NT	Homo sapiens non-kinase Cdc42 effector protein SPEC2 (LOC56990), mRNA
7044	18064	30454	2.22	6.0E-51	11429665	NT	Homo sapiens cerebral cell adhesion molecule (LOC51148), mRNA
9064	21801	34530	0.88	6.0E-51	11428525	NT	Homo sapiens hypothetical protein FLJ11042 (FLJ11042), mRNA
9064	21801	34531	0.88	6.0E-51	11428525	NT	Homo sapiens hypothetical protein FLJ11042 (FLJ11042), mRNA
9601	22101	35064	1.79	6.0E-51	7681535	NT	Homo sapiens B9 protein (B9), mRNA
9677	22176	35151	1.35	6.0E-51	U50093.1	NT	Human ankyrin (ANK1) gene, exon 2
11136	23844	36884	1.83	6.0E-51	11526289	NT	Homo sapiens interleukin 17 receptor (IL17R), mRNA
11403	23854	36919	1.58	6.0E-51	5453949	NT	Homo sapiens protein phosphatase 2, regulatory subunit B (B56), alpha isoform (PPP2R5A) mRNA
11403	23854	36920	1.58	6.0E-51	5453949	NT	Homo sapiens protein phosphatase 2, regulatory subunit B (B56), alpha isoform (PPP2R5A) mRNA
824	13441	25948	6.74	5.0E-51	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
836	13452	25962	1.38	5.0E-51	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
1028	15431	26153	1.01	5.0E-51	AL133204.1	NT	Novel human gene mapping to chromosome X
1651	14243	26777	0.99	5.0E-51	5031980	NT	Homo sapiens 26S proteasome-associated pad1 homolog (POH1) mRNA
2629	15191	27759	9.09	5.0E-51	AJ007558.1	NT	Homo sapiens mRNA for nucleoporin 155
4017	16815	29088	1.21	5.0E-51	M30938.1	NT	Human Ku (p70/p80) subunit mRNA, complete cds
4017	16815	29089	1.21	5.0E-51	M30938.1	NT	Human Ku (p70/p80) subunit mRNA, complete cds
5231	17795	30214	1.86	5.0E-51	AB037832.1	NT	Homo sapiens mRNA for KIAA1411 protein, partial cds
11069	23581	36621	2.02	5.0E-51	BE501320.1	EST_HUMAN	7a41a02.x1 NC1_CGAP_G08 Homo sapiens cDNA clone IMAGE:3221258 3'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11160	23667	36712	4.75	5.0E-51	5803136	NT	Homo sapiens RNA binding motif protein 3 (RBM3), mRNA
140	12805	25294	15.49	3.0E-51	AI587348.1	EST_HUMAN	t81c09.x1 NCI_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2224720 3' similar to gb:M26326 KERATIN, TYPE I CYTOSKELETAL 18 (HUMAN);
1218	13818	26333	34.32	3.0E-51	AI587348.1	EST_HUMAN	t81c09.x1 NCI_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2224720 3' similar to gb:M26326 KERATIN, TYPE I CYTOSKELETAL 18 (HUMAN);
4420	17005	29448	2.04	3.0E-51	AL159142.1	NT	Novel human gene mapping to chromosome 22
7579	20095	32972	1.16	3.0E-51	R15914.1	EST_HUMAN	ye47c08.r1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:53233 5' similar to gb:M14123_cds4 RETROVIRUS-RELATED POLYPROTEIN (HUMAN); contains LTR5 repetitive element;
8773	21312		6.15	3.0E-51	M29083.1	NT	Human hnRNP C2 protein mRNA
8998	25124		0.8	3.0E-51	AW563777.1	EST_HUMAN	ta04d08.y1 Human Pancreatic Islets Homo sapiens cDNA 5'
12348	24529		2.15	3.0E-51	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
389	13035	25524	2.03	2.0E-51	4507798	NT	Homo sapiens ubiquitin protein ligase E3A (human papilloma virus E6-associated protein, Angelman syndrome) (UBE3A) mRNA
717	13338	25824	0.94	2.0E-51	BE391063.1	EST_HUMAN	601285694F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3607463 5'
717	13338	25825	0.94	2.0E-51	BE391063.1	EST_HUMAN	601285694F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3607463 5'
1728	14317	28860	5.61	2.0E-51	AA233352.1	EST_HUMAN	z30a05.r1 Stragene NT2 neuronal precursor 937230 Homo sapiens cDNA clone IMAGE:664880 5' similar to TR:G233226 G233226 RTVL-H PROTEIN. ; contains LTR7.13 LTR7 repetitive element;
3795	16395	28860	2.71	2.0E-51	A1492415.1	EST_HUMAN	z30a05.r1 Stragene NT2 neuronal precursor 937230 Homo sapiens cDNA clone IMAGE:664880 5' similar to TR:G233226 G233226 RTVL-H PROTEIN. ; contains LTR7.13 LTR7 repetitive element;
4592	17175	29621	1.73	2.0E-51	AW137828.1	EST_HUMAN	U1-HB11-adj-4-02-0-JLs1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2718851 3'
5630	18259	30730	0.78	2.0E-51	A1732851.1	EST_HUMAN	db34f09.x5 NCI_CGAP_Kid5 Homo sapiens cDNA clone IMAGE:1325609 3' similar to SW:NME1_MOUSE P35436 GLUTAMATE [NMMA] RECEPTOR SUBUNIT EPSILON 1 PRECURSOR ;
5630	18259	30731	0.76	2.0E-51	A1732851.1	EST_HUMAN	db34f09.x5 NCI_CGAP_Kid5 Homo sapiens cDNA clone IMAGE:1325609 3' similar to SW:NME1_MOUSE P35436 GLUTAMATE [NMMA] RECEPTOR SUBUNIT EPSILON 1 PRECURSOR ;
6168	18778	31542	3.29	2.0E-51	BE782015.1	EST_HUMAN	P35436 GLUTAMATE [NMMA] RECEPTOR SUBUNIT EPSILON 1 PRECURSOR ;
7350	19878		0.77	2.0E-51	AF219927.1	NT	601470446F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3873563 5'
7480	20002	32867	1	2.0E-51	7662349	NT	Homo sapiens diacylglycerol kinase Iota (DGKI) gene, exon 23
8632	21171	34088	2.06	2.0E-51	BE901894.1	EST_HUMAN	Homo sapiens cell recognition molecule Caspr2 (KIAA0888), mRNA
8632	21171	34089	2.06	2.0E-51	BE901894.1	EST_HUMAN	601878787F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3859613 5'
8884	21502	34424	0.95	2.0E-51	11037064	NT	601878787F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3859613 5'
9431	21957	34905	1.48	2.0E-51	A1917078.1	EST_HUMAN	Homo sapiens disrupted in schizophrenia 1 (DISC1), mRNA
9521	22021	34978	5.22	2.0E-51	BE165980.1	EST_HUMAN	ts74a07.x1 NCI_CGAP_GC8 Homo sapiens cDNA clone IMAGE:2236980 3' similar to SW:TRKC_HUMAN Q16288 NT-3 GROWTH FACTOR RECEPTOR PRECURSOR ;
							MR3-HT0487-150200-113-g01 HT0487 Homo sapiens cDNA

Table 4

Single Exon Probes Expressed In Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9537	22037	34997	0.61	2.0E-51	AB007926.1	NT	Homo sapiens mRNA for KIAA0457 protein, partial cds
10329	22623	35819	1.73	2.0E-51	AV682474.1	EST_HUMAN	AV682474.1 GKB Homo sapiens cDNA clone GKBAGF05 5'
10368	22862	35855	1.03	2.0E-51	AA378559.1	EST_HUMAN	EST91296 Synovial sarcoma Homo sapiens cDNA 5' and
11207	18259	30730	11.47	2.0E-51	AI732851.1	EST_HUMAN	ab34709.x5 NCL_CGAP_Kid5 Homo sapiens cDNA clone IMAGE:1325609 3' similar to SW:NME1_MOUSE
11207	18259	30731	11.47	2.0E-51	AI732851.1	EST_HUMAN	P35436 GLUTAMATE [NMDA] RECEPTOR SUBUNIT EPSILON 1 PRECURSOR ;
12343	24524	30924	2.6	2.0E-51	11419159	NT	ab34709.x5 NCL_CGAP_Kid5 Homo sapiens cDNA clone IMAGE:1325609 3' similar to SW:NME1_MOUSE
119	12790	25272	27.93	1.0E-51	4503528	NT	P35436 GLUTAMATE [NMDA] RECEPTOR SUBUNIT EPSILON 1 PRECURSOR ;
1541	14133	29531	28.47	1.0E-51	AV742248.1	EST_HUMAN	P35436 GLUTAMATE [NMDA] RECEPTOR SUBUNIT EPSILON 1 PRECURSOR ;
4498	17082	29532	1	1.0E-51	4759071	NT	Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (trithorax (Drosophila) homolog); translocated to, 4
5588	18219	30669	2.68	1.0E-51	T18862.1	EST_HUMAN	(MLLT4), mRNA
7645	20157	33044	0.85	1.0E-51	AI572532.1	EST_HUMAN	Homo sapiens eukaryotic translation initiation factor 4A, isoform 1 (EIF4A1) mRNA
7844	20388	33289	7	1.0E-51	BF434359.1	EST_HUMAN	AV742248 CB Homo sapiens cDNA clone CBFBC12 5'
11613	25129		3.01	1.0E-51	AV780590.1	EST_HUMAN	Homo sapiens small inducible cytokine subfamily A (Cys-Cys), member 15 (SCYA15) mRNA
10568	23104	36118	1.71	9.0E-52	R91638.1	EST_HUMAN	Homo sapiens small inducible cytokine subfamily A (Cys-Cys), member 15 (SCYA15) mRNA
10568	23104	36119	1.71	9.0E-52	R91638.1	EST_HUMAN	b120561 Testis 1 Homo sapiens cDNA clone b12056
12105	24367		6.53	9.0E-52	AA777621.1	EST_HUMAN	7c98b02.x1 NCL_CGAP_Ov18 Homo sapiens cDNA clone IMAGE:2089106 3'
163	12826	25313	8	8.0E-52	AA720574.1	EST_HUMAN	7c98b02.x1 NCL_CGAP_Ov18 Homo sapiens cDNA clone IMAGE:3644091 3' similar to TR:P87892 P87892
1543	14135	26689	1.32	8.0E-52	X84900.1	NT	PROTEASE ;
1694	14286	26821	2.12	8.0E-52	11968028	NT	AV780590 MDS Homo sapiens cDNA clone MDSB802 5'
1694	14286	26822	2.12	8.0E-52	11968028	NT	y10h04.r1 Soares fetal liver spleen INFLS Homo sapiens cDNA clone IMAGE:196567 5' similar to
4066	14286	26821	6.96	8.0E-52	11968028	NT	SP:YGAF_ECOLI_P37339 HYPOTHETICAL PROTEIN IN GABP 3'REGION ;
							y10h04.r1 Soares fetal liver spleen INFLS Homo sapiens cDNA clone IMAGE:196567 5' similar to
							SP:YGAF_ECOLI_P37339 HYPOTHETICAL PROTEIN IN GABP 3'REGION ;
							z95a07.s1 Soares_fetal_liver_spleen_INFLS_S1 Homo sapiens cDNA clone IMAGE:448500 3' similar to
							contains THR13 THR repetitive element ;
							rw21g02.s1 NCL_CGAP_GCB0 Homo sapiens cDNA clone IMAGE:1241138 3' similar to contains THR13
							THR repetitive element ;
							H sapiens mRNA for laminin-5, alpha3b chain
							Homo sapiens hypothetical protein FLJ13556 similar to N-myc downstream regulated 3 (FLJ13556), mRNA
							Homo sapiens hypothetical protein FLJ13556 similar to N-myc downstream regulated 3 (FLJ13556), mRNA
							Homo sapiens hypothetical protein FLJ13556 similar to N-myc downstream regulated 3 (FLJ13556), mRNA

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Table 4
Single Exon Probes Expressed In Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4066	14286	26822	6.96	8.0E-52	11988028	NT	Homo sapiens hypothetical protein FLJ13556 similar to N-myc downstream regulated 3 (FLJ13556), mRNA
7526	20046	32915	1.8	8.0E-52	11416585	NT	Homo sapiens transforming growth factor, beta-induced, 68kD (TGFB1), mRNA
7526	20046	32916	1.8	8.0E-52	11416585	NT	Homo sapiens transforming growth factor, beta-induced, 68kD (TGFB1), mRNA
8943	21481	34403	1.39	7.0E-52	W56471.1	EST_HUMAN	z558a06.r1 Soares_parathyroid_tumor_NbHPA Homo sapiens cDNA clone IMAGE:326578 5' similar to contains Alu repetitive element
1229	13828		0.85	6.0E-52	BE072409.1	EST_HUMAN	QV3-BT0337-271299-049-d07 BT0537 Homo sapiens cDNA
1732	14323	26865	2.63	6.0E-52	AF109607.1	NT	Homo sapiens S184 gene, partial cds; PS1 and hypothetical protein genes, complete cds; and S171 gene, partial cds
5802	18524	31249	2.12	6.0E-52	AI208794.1	EST_HUMAN	qg44f04.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1838047 3'
11086	23598	36635	1.83	6.0E-52	BE048172.1	EST_HUMAN	tz46h04.y1 NCL_CGAP_Brm52 Homo sapiens cDNA clone IMAGE:2291671 5' similar to SW:PGBM_MOUSE 005783 BASEMENT MEMBRANE-SPECIFIC HEPARAN SULFATE PROTEOGLYCAN CORE PROTEIN PRECURSOR ;
4535	17119	28566	1.77	5.0E-52	Z78898.1	NT	H.sapiens flow-sorted chromosome 9 HindIII fragment, SC6pA18H7
1702	14295	26830	1.27	4.0E-52	AF257318.1	NT	Homo sapiens SH3-containing protein SH3GLB1 mRNA, complete cds
1823	14412	26957	1.35	4.0E-52	4758843	NT	Homo sapiens nucleoporin 155kD (NUP155) mRNA
4000	16598	29070	0.62	4.0E-52	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
4849	17427	29879	0.77	4.0E-52	AI766814.1	EST_HUMAN	w89b02.x1 NCL_CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2400459 3'
5490	18124	30531	1.2	4.0E-52	4506132	NT	Homo sapiens phosphoribosyl pyrophosphate synthetase-associated protein 2 (PRPSAP2) mRNA
5490	18124	30532	1.2	4.0E-52	4506132	NT	Homo sapiens phosphoribosyl pyrophosphate synthetase-associated protein 2 (PRPSAP2) mRNA
7982	20524	33430	1.63	4.0E-52	BE622032.1	EST_HUMAN	601440687F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3915836 5'
8471	21011	33928	5.51	4.0E-52	11417035	NT	Homo sapiens hydroxysteroid (17-beta) dehydrogenase 4 (HSD17B4), mRNA
11833	24267		5.12	4.0E-52	11418177	NT	Homo sapiens Ran GTPase activating protein 1 (RANGAP1), mRNA
12458	24589		13.96	4.0E-52	AB002059.1	NT	Homo sapiens DNA for Human P2XM, complete cds
12601	24687		1.57	4.0E-52	AB011399.1	NT	Homo sapiens gene for AF-8, complete cds
4168	16757		12.28	3.0E-52	11437042	NT	Homo sapiens hypothetical protein FLJ10675 (FLJ10675), mRNA
588	13218	25694	4.18	2.0E-52	M10976.1	NT	Human endogenous retroviral DNA (4-1), complete retroviral segment
588	13218	25695	4.18	2.0E-52	M10976.1	NT	Human endogenous retroviral DNA (4-1), complete retroviral segment
1793	14383	26928	2.64	2.0E-52	AB007899.1	NT	Homo sapiens KIAA0439 mRNA, partial cds
2544	15108	27681	1.1	2.0E-52	BE207575.1	EST_HUMAN	b66607.y1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3030421 5' similar to gb:X16483 M.musculus mRNA for Zpf-1 zinc finger protein (MOUSE);
2764	15318		5.55	2.0E-52	BF677892.1	EST_HUMAN	602084710F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4248891 5'
5113	17685	30121	3.51	2.0E-52	AL137188.3	NT	Novel human gene mapping to chromosome 20, similar to membrane transporters
5881	18503	31229	3.32	2.0E-52	AW848041.1	EST_HUMAN	IL3-CT0214-231289-053-E12 CT0214 Homo sapiens cDNA

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6505	19105	31860	1.86	2.0E-52	11141866	NT	Homo sapiens interleukin 21 receptor (IL21R), mRNA
6814	19405	32221	0.89	2.0E-52	AB029004.1	NT	Homo sapiens mRNA for KIAA1081 protein, partial cds
7022	19556	32381	0.68	2.0E-52	A1792146.1	EST_HUMAN	os45d12.y5 NCI_CGAP_Br2 Homo sapiens cDNA clone IMAGE:1608311 5'
8587	21126		10.89	2.0E-52	AF147880.1	NT	Macaca mulatta beta-tubulin mRNA, complete cds
8866	21405	34329	0.82	2.0E-52	AA778795.1	EST_HUMAN	z445g05.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:453272 3'
9400	21823		1.25	2.0E-52	4758789	NT	Homo sapiens NADH dehydrogenase (ubiquinone) Fe-S protein 5 (15kD) (NADH-coenzyme Q reductase) (NDUFS5) mRNA
10024	22519	35514	5.62	2.0E-52	5730038	NT	Homo sapiens SET domain and mariner transposase fusion gene (SETMAR) mRNA
10024	22519	35515	5.62	2.0E-52	5730038	NT	Homo sapiens SET domain and mariner transposase fusion gene (SETMAR) mRNA
11083	23595	36630	6.08	2.0E-52	A1831492.1	EST_HUMAN	w49c04.x1 NCI_CGAP_Lu19 Homo sapiens cDNA clone IMAGE:2406150 3' similar to contains THR.b2 THR repetitive element;
11083	23595	36631	6.08	2.0E-52	A1831492.1	EST_HUMAN	w49c04.x1 NCI_CGAP_Lu19 Homo sapiens cDNA clone IMAGE:2406150 3' similar to contains THR.b2 THR repetitive element;
11094	23606	36646	3.85	2.0E-52	AV715377.1	EST_HUMAN	AV715377 DCB Homo sapiens cDNA clone DCBAIE03 5'
11231	23762		1.87	2.0E-52	W70260.1	EST_HUMAN	z349g12.l1 Soares_fetal_heart_NHH19W Homo sapiens cDNA clone IMAGE:344038 5'
11484	23933		3.4	2.0E-52	11417890	NT	Homo sapiens LIM domain kinase 2 (LIMK2), mRNA
11741	25099	30500	14.03	2.0E-52	AW236297.1	EST_HUMAN	xn72d07.x1 NCI_CGAP_OML1 Homo sapiens cDNA clone IMAGE:2700036 3' similar to contains Alu repetitive element; contains element L TR2 repetitive element;
12154	24396		3.83	2.0E-52	A1806985.1	EST_HUMAN	w67a05.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2360649 3' similar to TR:Q16859 Q16859 CARBOXYLESTERASE;
558	13189	25668	1.59	1.0E-52	AA634445.1	EST_HUMAN	zu75h12.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:743879 3'
1414	14007	26535	11.81	1.0E-52	4504026	NT	Homo sapiens glutamate-ammonia ligase (glutamine synthase) (GLUL) mRNA
2573	15138		1.75	1.0E-52	4502238	NT	Homo sapiens arylsulfatase D (ARSD), transcript variant 1, mRNA
3095	15710	28181	1.65	1.0E-52	S81070.1	NT	pol-reverse transcriptase homolog (retroviral element) (human, endogenous retroviral element RTVL-Hp1, Genomic, 660 nt)
5536	18168	30582	4.64	1.0E-52	M29426.1	NT	Human P-glycoprotein (MDR1) gene, exon 4
6527	19127	31921	2.18	1.0E-52	U38984.1	NT	Human PMS2 related (hPMSR2) gene, complete cds
7458	19881	32846	2.21	1.0E-52	X07292.1	NT	Human aldolase C gene for fructose-1,6-bisphosphate aldolase
8401	20941		1.24	1.0E-52	AL163227.2	NT	Homo sapiens chromosome 21 segment HS21C027
9116	21652	34583	0.91	1.0E-52	AF078779.1	NT	Rattus norvegicus pulative four repeat ion channel mRNA, complete cds
10469	22963		1.13	1.0E-52	AW020370.1	EST_HUMAN	df08g05.y1 Morton_Fetal_Cochlea Homo sapiens cDNA clone IMAGE:2483145 5'
10479	22973		0.78	1.0E-52	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
10446	23178	38191	10.04	1.0E-52	U48286.1	NT	Homo sapiens protein tyrosine phosphatase PTPCAAX1 (hPTPCAAX1) mRNA, complete cds
10716	23244		2.37	1.0E-52	11426321	NT	Homo sapiens proteasome (prosome, macropain) subunit, beta type, 2 (PSMB2), mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3859	16457	28920	1.13	9.0E-53	4508084	NT	Homo sapiens protein kinase, cAMP-dependent, regulatory, type II, beta (PRKAR2B) mRNA
5186	17751	30182	0.91	9.0E-53	7881713	NT	Homo sapiens predicted osteoblast protein (OS3786), mRNA
11987	24297		3.78	7.0E-53	BF238465.1	EST_HUMAN	601804771F1 NIH_MGC_54 Homo sapiens cDNA clone IMAGE:4132783 5'
12432	24969		5.2	7.0E-53	AI421782.1	EST_HUMAN	ff44607 x1 NCI_CGAP_Brn23 Homo sapiens cDNA clone IMAGE:2089077 3' similar to contains THR.11
4174	16765	28213	4.45	5.0E-53	4759543	NT	THR repetitive element;
5364	17824	30338	1	5.0E-53	AL163282.2	NT	Homo sapiens chromosome 21 segment HS21C082
12035	24324		1.68	5.0E-53	AW813563.1	EST_HUMAN	RC3-ST0197-151098-011-g10 ST0197 Homo sapiens cDNA
53	12733	25200	1.15	4.0E-53	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
53	12733	25201	1.15	4.0E-53	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
4947	17522	29984	0.99	4.0E-53	7705414	NT	Homo sapiens hook1 protein (HOOK1), mRNA
9337	21851		0.68	4.0E-53	AI613037.1	EST_HUMAN	Y08H04.x1 NCI_CGAP_U13 Homo sapiens cDNA clone IMAGE:2278327 3'
9671	22170		0.71	4.0E-53	F13080.1	EST_HUMAN	HSC3ID041 normalized infant brain cDNA Homo sapiens cDNA clone c-3id04
11081	23603	36642	3.98	4.0E-53	BF128701.1	EST_HUMAN	601810989F1 NIH_MGC_48 Homo sapiens cDNA clone IMAGE:4053977 5'
11091	23603	36643	3.98	4.0E-53	BF128701.1	EST_HUMAN	601810989F1 NIH_MGC_48 Homo sapiens cDNA clone IMAGE:4053977 5'
2684	15242	27810	2.09	3.0E-53	AB026898.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
3794	15394	28859	1.19	3.0E-53	AW050836.1	EST_HUMAN	w22c07.x1 Soares_Dickgraefe_colon_NHCD Homo sapiens cDNA clone IMAGE:2558788 3'
4691	17273	29721	0.85	3.0E-53	AW803563.1	EST_HUMAN	IL2-UM0081-240300-055-D03 UM0081 Homo sapiens cDNA
5618	18247	30698	0.99	3.0E-53	AF001212.1	NT	Homo sapiens 26S proteasome subunit 9 mRNA, complete cds
5908	18433	31154	0.91	3.0E-53	11526287	NT	Homo sapiens MIL-1 protein (MIL1), mRNA
6341	18947	31724	0.89	3.0E-53	BE160025.1	EST_HUMAN	QV1-HT0412-280300-123-c04 HT0412 Homo sapiens cDNA
7155	19687	32530	0.92	3.0E-53	Y10388.3	NT	H.sapiens graf gene
7155	19687	32531	0.92	3.0E-53	Y10388.3	NT	H.sapiens graf gene
8246	20787	33708	10.03	3.0E-53	S72043.1	NT	GIF=growth inhibitory factor [human, brain, Genomic, 2015 nt]
8793	21332	34256	0.51	3.0E-53	10835090	NT	Homo sapiens bone morphogenetic protein 5 (BMP5), mRNA
8987	21525		7.06	3.0E-53	5901953	NT	Homo sapiens FGFR1 oncogene partner (FOP), mRNA
11897	24221		1.27	3.0E-53	11426423	NT	Homo sapiens acyl-Coenzyme A carboxylase alpha (ACACA), mRNA
483	13116		32.96	2.0E-53	AA366556.1	EST_HUMAN	EST77525 Pancreas tumor III Homo sapiens cDNA 5' end
2385	14936	27508	5.15	2.0E-53	U78027.1	NT	Homo sapiens Bruton's tyrosine kinase (BTK), alpha-D-galactosidase A (GLA), L44-like ribosomal protein (L44L) and FTP3 (FTP3) genes, complete cds
2574	15137		12.23	2.0E-53	4502316	NT	Homo sapiens ATPase, H+ transporting, lysosomal (vacuolar proton pump) 31kD; Vacuolar proton-ATPase, subunit E; V-ATPase, subunit E (ATP6E), mRNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2752	15307	27871	0.9	2.0E-53	4757915	NT	Homo sapiens core-binding factor, runt domain, alpha subunit 2; translocated to, 1; cyclin D-related (CBFA2T1) mRNA
2752	15307	27872	0.9	2.0E-53	4757915	NT	Homo sapiens core-binding factor, runt domain, alpha subunit 2; translocated to, 1; cyclin D-related (CBFA2T1) mRNA
3255	15887	28347	0.65	2.0E-53	7705687	NT	Homo sapiens leucine aminopeptidase (LOC51056), mRNA
3282	15883	28372	0.67	2.0E-53	AF083822.1	NT	Homo sapiens dihydropyridine receptor alpha 2 subunit (CACNA2D1) gene, exon 6
4133	18725	29179	2.15	2.0E-53	M61873.1	NT	Human Kruppel-related DNA-binding protein (TF34) gene, partial cds
5619	18248	30698	3.27	2.0E-53	BF334740.1	EST_HUMAN	PM1-CT0396-170800-001-q03 CT0396 Homo sapiens cDNA
5619	18248	30700	3.27	2.0E-53	BF334740.1	EST_HUMAN	PM1-CT0396-170800-001-q03 CT0396 Homo sapiens cDNA
7812	20355	33263	0.84	2.0E-53	AW975598.1	EST_HUMAN	EST387707 MAGE resequences, MAGN Homo sapiens cDNA
7949	20491		0.83	2.0E-53	AA085852.1	EST_HUMAN	15428.seq.F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'
9329	21843		17.91	2.0E-53	AW245676.1	EST_HUMAN	2822665.Sprime NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2822665 5'
1495	14087	26627	1.88	1.0E-53	AJ271736.1	NT	Homo sapiens Xq pseudautosomal region; segment 2/2
3456	16063	28538	1.4	1.0E-53	AB026898.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
4220	16808	29256	0.67	1.0E-53	AV714177	EST_HUMAN	AV714177 DCB Homo sapiens cDNA clone DCBAWF08 5'
5099	17671	30110	1.08	1.0E-53	BE296388.1	EST_HUMAN	601176725F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3531919 5'
6794	19385	32201	1.34	1.0E-53	BF364201.1	EST_HUMAN	CM4-NN1029-150800-543-q02 NN1029 Homo sapiens cDNA
7295	19823	32882	0.93	1.0E-53	BE012071.1	EST_HUMAN	RC5-BN1058-270400-031-D01 BN1058 Homo sapiens cDNA
7876	20418	33326	0.5	1.0E-53	AA246072.1	EST_HUMAN	119571.seq.F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'
9018	21555	34483	15.04	1.0E-53	X79536.1	NT	H. sapiens mRNA for hnRNP core protein A1
3290	15901	28381	0.57	9.0E-54	4504116	NT	Homo sapiens glutamate receptor, ionotropic, kainate 1 (GRIK1) mRNA
5505	24743	30549	5.34	9.0E-54	4506786	NT	Homo sapiens IQ motif containing GTPase activating protein 1 (IQGAP1) mRNA
221	12882	25367	3.54	8.0E-54	BE386785.1	EST_HUMAN	601272863F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3614031 5'
1875	14461	27018	1.62	8.0E-54	4504610	NT	Homo sapiens insulin-like growth factor 2 receptor (IGF2R) mRNA
4841	17419	29871	0.6	8.0E-54	4507848	NT	Homo sapiens ubiquitin specific protease 13 (isopeptidase T-3) (USP13) mRNA
4841	17419	29872	0.6	8.0E-54	4507848	NT	Homo sapiens ubiquitin specific protease 13 (isopeptidase T-3) (USP13) mRNA
6092	18708	31456	20.41	8.0E-54	6005700	NT	Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 8 (ABCA8), mRNA
407	13082	25574	1.55	7.0E-54	AA812537.1	EST_HUMAN	at79c12.s1 Soares_testis_NHT Homo sapiens cDNA clone 1377046 3' similar to contains MER30.13 MER30 repetitive element ;
1870	14456	27013	2.37	7.0E-54	Y16645.1	NT	Homo sapiens mRNA for monocyte chemotactic protein-2
2246	14820	27395	5.08	7.0E-54	N27177.1	EST_HUMAN	yw68d12.s1 Soares_placenta_86dweeks_2NbHP8tG9W Homo sapiens cDNA clone IMAGE:257399 3' similar to contains LTR7.b3 LTR7 repetitive element ;
4694	17276		23.4	7.0E-54	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10034	22529	35524	2.32	7.0E-54	11417222	NT	Homo sapiens similar to nuclear factor related to kappa B binding protein (H. sapiens) (LOC63182), mRNA
11171	23678						qb87g03.x1 Soares_fetal_hear_NbHH19W Homo sapiens cDNA clone IMAGE:1705204 3' similar to
26	12705	25183	7.41	7.0E-54	A160189.1	EST_HUMAN	contains OFR.11 OFR repetitive element;
408	13083	25575	2.31	6.0E-54	AB003618.1	NT	Homo sapiens DNA for MIOB, exon 4, 5 and partial cds
408	13083	25576	1.14	6.0E-54	8922148	NT	Homo sapiens hypothetical protein DKFZp434M035 (DKFZp434M035), mRNA
1917	14502	27058	1.14	6.0E-54	8922148	NT	Homo sapiens hypothetical protein DKFZp434M035 (DKFZp434M035), mRNA
1917	14502	27059	1.44	6.0E-54	4505052	NT	Homo sapiens lymphocyte antigen 75 (LY75) mRNA, and translated products
3322	15802	28409	1.06	6.0E-54	4505052	NT	Homo sapiens lymphocyte antigen 75 (LY75) mRNA, and translated products
4078	16872	29133	35.08	6.0E-54	8922148	NT	Homo sapiens hypothetical protein DKFZp434M035 (DKFZp434M035), mRNA
4561	17144	29591	0.88	6.0E-54	4502872	NT	Homo sapiens chloride channel 6 (CLCN6) mRNA
4969	17543	29985	1.07	6.0E-54	AV754746.1	EST_HUMAN	AV754746 TP Homo sapiens cDNA clone TPGAAC10 5'
5001	17574		1.81	6.0E-54	4505806	NT	Homo sapiens phosphatidylinositol 4-kinase, catalytic, alpha polypeptide (PIK4CA) mRNA
5140	17574		2.28	6.0E-54	Y09846.1	NT	H sapiens shc pseudogene, p86 isoform
11329	23027	38036	3.33	6.0E-54	Y09846.1	NT	H sapiens shc pseudogene, p86 isoform
2195	14771	27345	2.41	5.0E-54	AW813567.1	EST_HUMAN	RC3-ST0197-151099-011-408 ST0197 Homo sapiens cDNA
195	12855		111.77	4.0E-54	P51523	SWISSPROT	ZINC FINGER PROTEIN 84 (ZINC FINGER PROTEIN HPF2)
					AF110103.1	NT	Tupala belangeri beta-actin mRNA, partial cds
							EST177696 Jurkat T-cells VI Homo sapiens cDNA 5' end similar to glyceraldehyde-3-phosphate
							dehydrogenase
991	13603	26117	69.58	4.0E-54	AA308784.1	EST_HUMAN	Human mRNA for KIAA0077 gene, partial cds
1841	14429	26981	2.97	4.0E-54	D38521.1	NT	Human mRNA for KIAA0077 gene, partial cds
1841	14429	26982	2.97	4.0E-54	D38521.1	NT	Human mRNA for KIAA0077 gene, partial cds
							wc26d11.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2328269 3' similar to TR002711
3238	15850		1.45	4.0E-54	A1935086.1	EST_HUMAN	O02711 PRO-POL-DUTPASE POLYPROTEIN ;
97	12773	25255	9.57	3.0E-54	AA313487.1	EST_HUMAN	EST183371 Colon carcinoma (HCC) cell line Homo sapiens cDNA 5' end
2804	15166	27733	0.97	3.0E-54	AL110383.1	EST_HUMAN	DKFZp434E0731_1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434E0731 5'
6083	18880	31422	1.44	3.0E-54	4502434	NT	Homo sapiens BMX non-receptor tyrosine kinase (BMX) mRNA
7422	19646	32811	1.54	3.0E-54	AA844061.1	EST_HUMAN	al92c08.s1 Soares_parathyroid_tumor_NbHPA Homo sapiens cDNA clone IMAGE:1388270 3'
7422	19646	32812	1.54	3.0E-54	AA844061.1	EST_HUMAN	al92c08.s1 Soares_parathyroid_tumor_NbHPA Homo sapiens cDNA clone IMAGE:1388270 3'
10984	23479	36504	4.52	3.0E-54	BF345600.1	EST_HUMAN	602019408F1 NCI CGAP_Brn67 Homo sapiens cDNA clone IMAGE:4155121 5'
							z70121.1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:727727 5' similar to TR:G191315
11247	23777	36834	4.44	3.0E-54	AA393362.1	EST_HUMAN	G191315 ANDROGEN-DEPENDENT EXPRESSED PROTEIN ;
11844	24208	31040	2.75	3.0E-54	AW954559.1	EST_HUMAN	EST368629 IMAGE resequences, MAGC Homo sapiens cDNA
11885	25059		4.05	3.0E-54	AW748985.1	EST_HUMAN	RC1-BT0313-131199-011-b09 BT0313 Homo sapiens cDNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
870	13294	25774	29.57	2.0E-54	5031900	NT	Homo sapiens killer cell lectin-like receptor subfamily G, member 1 (KLRG1), mRNA
1409	14002	28530	1.59	2.0E-54	4507164	NT	Homo sapiens nuclear antigen Sp100 (SP100) mRNA
1595	14188	28719	1.03	2.0E-54	AA655008.1	EST_HUMAN	nt78a09.s1 NCL_CGAP_Pr3 Homo sapiens cDNA clone IMAGE:1204800 similar to contains element L1 repetitive element ;
2577	15139	27709	0.88	2.0E-54	AW163175.1	EST_HUMAN	au92g03.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2783764 5' similar to
2635	15195	27768	1.29	2.0E-54	AL163210.2	NT	SW:CU1_HUMAN Q13616 CULLIN HOMOLOG 1 ;
2920	15537	28012	1.26	2.0E-54	AW057524.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C010
3602	16206		5.09	2.0E-54	AA532925.1	EST_HUMAN	wy90b12.x1 Soares NSF_F8_gw_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:2552927 3' similar to
3915	16513	28975	0.82	2.0E-54	4506376	NT	TR:Q62084.Q62084 PHOSPHOLIPASE C NEIGHBORING ;
3915	16513	28976	0.62	2.0E-54	4506376	NT	nt45g09.s1 NCL_CGAP_Pr6 Homo sapiens cDNA clone IMAGE:995488 similar to gb:X53777 60S
4283	16869		2.42	2.0E-54	4502642	NT	RIBOSOMAL PROTEIN L23 (HUMAN);
4536	17120		1.11	2.0E-54	AF208161.1	NT	Homo sapiens mitogen-activated protein kinase kinase kinase 3 (MAP4K3), mRNA
4541	17125		3.09	2.0E-54	AL163201.2	NT	Homo sapiens chaperonin containing T-complex subunit 6 (CCT6) mRNA
5666	18293	30773	2.15	2.0E-54	4759069	NT	Homo sapiens synctin precursor, mRNA, complete cds
5788	18413	31130	0.98	2.0E-54	BE047884.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C001
5935	18558	31284	3.96	2.0E-54	11428657	NT	Homo sapiens small inducible cytokine subfamily A (Cys-Cys), member 14 (SCYA14) mRNA
6022	18641	31381	11.65	2.0E-54	AB046811.1	NT	tz43c11.y1 NCL_CGAP_Brn52 Homo sapiens cDNA clone IMAGE:2291348 5'
6022	18641	31382	11.65	2.0E-54	AB046811.1	NT	Homo sapiens KIAA0100 gene product (KIAA0100), mRNA
6763	19356	32165	0.88	2.0E-54	AF008915.1	NT	Homo sapiens mRNA for KIAA1591 protein, partial cds
7177	19709	32557	8.13	2.0E-54	11426544	NT	Homo sapiens mRNA for KIAA1591 protein, partial cds
9547	22047	35008	3.27	2.0E-54	AB001025.1	NT	Homo sapiens EVIS homolog mRNA, complete cds
9922	22418	35392	1.45	2.0E-54	11429127	NT	Homo sapiens neurofibromin 1 (neurofibromatosis, von Recklinghausen disease, Watson disease) (NF1), mRNA
10028	22523	35519	0.88	2.0E-54	11416762	NT	Homo sapiens mRNA for brain ryonodine receptor, complete cds
10028	22523	35520	0.88	2.0E-54	11416762	NT	Homo sapiens Janus kinase 2 (a protein tyrosine kinase) (JAK2), mRNA
11573	24020		3.33	2.0E-54	7657454	NT	Homo sapiens serologically defined colon cancer antigen 10 (SDCCAG10), mRNA
12368	24539	30903	2.87	2.0E-54	8567387	NT	Homo sapiens serologically defined colon cancer antigen 10 (SDCCAG10), mRNA
4564	17147		1.23	1.0E-54	BF315418.1	EST_HUMAN	Homo sapiens pascadillo (zabrafish) homolog 1, containing BRCT domain (PES1), mRNA
8664	21203	34121	0.64	1.0E-54	11417222	NT	Homo sapiens period (Drosophila) homolog 3 (PER3), mRNA
10152	22847	35640	0.56	1.0E-54	AA412409.1	EST_HUMAN	Homo sapiens period (Drosophila) homolog 3 (PER3), mRNA
							601899230F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4128535 5'
							Homo sapiens similar to nuclear factor related to kappa B binding protein (H. sapiens) (LOC63182), mRNA
							zu10a09.r1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:731464 5'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10152	22847	35841	0.98	1.0E-54	AA412409.1	EST_HUMAN	zu10609.r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:731464 5'
12547	24652		3.58	1.0E-54	AU077341.1	EST_HUMAN	AU077341 Sugano cDNA library Homo sapiens cDNA clone Zv6C880 similar to 5'-end region of Human gamma-glutamyl transpeptidase mRNA, 5 end
10282	22757	35744	0.81	9.0E-55	BE081469.1	EST_HUMAN	QV2-BT0635-160400-143-h12 BT0635 Homo sapiens cDNA
1359	13953		0.91	8.0E-55	Y07829.2	NT	Homo sapiens RFB30 gene for RING finger protein
1362	13958		2.21	8.0E-55	Y07829.2	NT	Homo sapiens RFB30 gene for RING finger protein
11075	23587		2.49	8.0E-55	AW409744.1	EST_HUMAN	fh02a02.x1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:2860907 5'
1120	13723	26236	1.55	7.0E-55	R09346.1	EST_HUMAN	SP-C561_BOVIN P10897 CYTOCHROME ; yf26e04.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:127698 5' similar to xd78c02.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2603522 3' similar to TR:O60365
8739	21278		1.75	7.0E-55	AW103839.1	EST_HUMAN	O60365 FOS39554_1 ;
9109	21645	34586	1.34	7.0E-55	AA889581.1	EST_HUMAN	ek28a11.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1407260 3'
9142	21677	34620	1.88	7.0E-55	AU139909.1	EST_HUMAN	AU139909 PLACE1 Homo sapiens cDNA clone PLACE1011578 5'
11087	23599	36636	14.07	7.0E-55	AI561056.1	EST_HUMAN	tg29f09.x1 NCI_CGAP_U11 Homo sapiens cDNA clone IMAGE:2210249 3'
11087	23599	36637	14.07	7.0E-55	AI561056.1	EST_HUMAN	tg29f09.x1 NCI_CGAP_U11 Homo sapiens cDNA clone IMAGE:2210249 3'
12516	24985		9.8	7.0E-55	H23396.1	EST_HUMAN	ym57g07.r1 Soares infant brain 1NIB Homo sapiens cDNA clone IMAGE:52444 5'
11389	23841	36906	2.37	6.0E-55	AB040934.1	NT	Homo sapiens mRNA for KIAA1501 protein, partial cds
1808	14398	26940	1.13	5.0E-55	AA704971.1	EST_HUMAN	z95b09.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:462817 3'
1808	14398	26941	1.13	5.0E-55	AA704971.1	EST_HUMAN	z95b09.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:462817 3'
6681	19257	32060	1.88	5.0E-55		NT	Homo sapiens arylsulfatase E (chondrodysplasia punctata 1) (ARSE), mRNA
6681	19257	32061	1.88	5.0E-55		NT	Homo sapiens arylsulfatase E (chondrodysplasia punctata 1) (ARSE), mRNA
6772	24769	32174	2.24	5.0E-56		NT	Homo sapiens paraoxonase 2 (PON2) mRNA, and translated products
6772	24769	32175	2.24	5.0E-55		NT	Homo sapiens paraoxonase 2 (PON2) mRNA, and translated products
7337	19864	32728	0.79	5.0E-55		NT	Homo sapiens speckle-type POZ protein (SPOP), mRNA
7936	20478	33388	0.65	5.0E-55	11528491	NT	Homo sapiens BCL2-associated athanogene (BAG1), mRNA
8974	21512	34435	2.35	5.0E-55	4508302	NT	Homo sapiens protein tyrosine phosphatase, receptor type, alpha polypeptide (PTPRA) mRNA
9243	21769		1.89	5.0E-55	BE064386.1	EST_HUMAN	RC4-BT0310-110300-015-f10 BT0310 Homo sapiens cDNA
9850	22445	35425	1.55	5.0E-55	AB014511.1	NT	Homo sapiens mRNA for KIAA0811 protein, partial cds
9850	22445	35426	1.55	5.0E-55	AB014511.1	NT	Homo sapiens mRNA for KIAA0811 protein, partial cds
10122	22617	35608	0.93	5.0E-55	5453765	NT	Homo sapiens nel (chicken)-like 2 (NELL2), mRNA
11925	24260		2.15	5.0E-55	11417972	NT	Homo sapiens pescadillo (zebrafish) homolog 1, containing BRCT domain (PES1), mRNA
59	15406	25209	1.97	4.0E-55	AW957094.1	EST_HUMAN	EST370064 IMAGE resequences, IMAGE Homo sapiens cDNA
700	13322	25809	41.83	4.0E-55	4826973	NT	Homo sapiens RNA binding motif protein, Y chromosome, family 1, member A1 (RBMY1A1) mRNA
1489	14082	26621	1.12	4.0E-55	7661713	NT	Homo sapiens predicted osteoblast protein (OS3788), mRNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1489	14082	26622	1.12	4.0E-55	7687713	NT	Homo sapiens predicted osteoblast protein (GS3786), mRNA
1561	14153		1.02	4.0E-55	BF061411.1	EST_HUMAN	752b10.x1 Soares_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3390043 3' similar to contains L1.13 L1 repetitive element:
2071	14651	27222	1.47	4.0E-55	4506180	NT	Homo sapiens proteasome (prosome, macropain) subunit, alpha type, 2 (PSMA2) mRNA
2071	14651	27223	1.47	4.0E-55	4506180	NT	Homo sapiens proteasome (prosome, macropain) subunit, alpha type, 2 (PSMA2) mRNA
2132	14710	27281	8.27	4.0E-55	4503314	NT	Homo sapiens diacylglycerol kinase, gamma (90kD) (DGKG) mRNA
2132	14710	27282	8.27	4.0E-55	4503314	NT	Homo sapiens diacylglycerol kinase, gamma (90kD) (DGKG) mRNA
2349	14920	27495	1.64	4.0E-55	4507794	NT	Homo sapiens ubiquitin-conjugating enzyme E2 variant 1 (UBE2V1) mRNA
3318	15928	28405	1.01	4.0E-55	AL163300.2	NT	Homo sapiens chromosome 21 segment HS21C100
8285	20826		7.61	4.0E-55	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C1010
11108	23618		4.93	4.0E-55	W28189.1	EST_HUMAN	43c5 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA
11845	24207		1.88	4.0E-55	BF303941.1	EST_HUMAN	60186575F2 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4120338 5'
6710	19304	32108	0.83	3.0E-55	AA077156.1	EST_HUMAN	7B09A08 Chromosome 7 Fetal Brain cDNA Library Homo sapiens cDNA clone 7B09A08
10224	22719	35709	0.48	3.0E-55	AF005273.1	NT	Sus scrofa domestica submaxillary apomucin mRNA, complete cds
11780	24167		6.76	3.0E-55	BE178519.1	EST_HUMAN	PM1-HT0603-090300-001-g08 HT0603 Homo sapiens cDNA
12563	24663		1.93	3.0E-55	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
400	13044	25535	2.16	2.0E-55	X57147.1	NT	Human endogenous retrovirus pHE.1 (ERV9)
577	13207		2.15	2.0E-55	M10976.1	NT	Human endogenous retroviral DNA (4-1), complete proviral segment
677	13301	25783	3.11	2.0E-55	4507266	NT	Homo sapiens syntaxin-binding protein 1 (STXBP1) mRNA, and translated products
2986	15602	26082	0.93	2.0E-55	4507798	NT	Homo sapiens ubiquitin protein ligase E3A (human papilloma virus E6-associated protein, Angelman syndrome) (UBE3A) mRNA
4888	17463	29817	2.37	2.0E-55	BE176986.1	EST_HUMAN	CM1-HT0876-150800-357-g03 HT0876 Homo sapiens cDNA
7515	24785	32802	0.67	2.0E-55	AW501988.1	EST_HUMAN	UI-HF-BNO-aks-f-08-Q-JL1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3078275 5'
8995	21533	34462	0.46	2.0E-55	BF224452.1	EST_HUMAN	h176h08.x1 NCI_CGAP_Kid111 Homo sapiens cDNA clone IMAGE:3134463 3'
8995	21533	34463	0.46	2.0E-55	BF224452.1	EST_HUMAN	h176h08.x1 NCI_CGAP_Kid111 Homo sapiens cDNA clone IMAGE:3134463 3'
9087	21823		3.77	2.0E-55	AI002836.1	EST_HUMAN	am88h05.s1 Stratagene echizo brain S11 Homo sapiens cDNA clone IMAGE:1684185 3' similar to contains THR.b2 THR repetitive element:
9165	21700		0.7	2.0E-55	BE007959.1	EST_HUMAN	QV0-BN0147-280400-213-g06 BN0147 Homo sapiens cDNA
10144	22639	35628	0.47	2.0E-55	AI439401.1	EST_HUMAN	f03h08.x1 NCI_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2140479 3'
10828	23349	35365	2.22	2.0E-55	AU119344.1	EST_HUMAN	AU119344 HEMBA1 Homo sapiens cDNA clone HEMBA1005583 5'
100	12776	25258	1.25	1.0E-55	4505060	NT	Homo sapiens mannose-6-phosphate receptor (cation dependent) (M6PR) mRNA
203	12864	25348	84.41	1.0E-55	U09823.1	NT	Oncotaglus curiculus New Zealand white elongation factor 1 alpha (Rabef1a2) mRNA, complete cds
600	13228	25702	0.86	1.0E-55	AI029718.1	EST_HUMAN	ov655q09.x1 Soares testis NHT Homo sapiens cDNA clone IMAGE:1644160 3'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1189	13790	26301	6.18	1.0E-55	AB020710.1	NT	Homo sapiens mRNA for KIAA0903 protein, partial cds
1993	14575	27134	1.21	1.0E-55	BE277861.1	EST_HUMAN	601120116F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:2987027 5'
1993	14575	27135	1.21	1.0E-55	BE277861.1	EST_HUMAN	601120116F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:2987027 5'
2363	14934		2.58	1.0E-55	5803174	NT	Homo sapiens SMA3 (SMA3), mRNA
2378	15398	27519	1.04	1.0E-55	AF000990.1	NT	Homo sapiens testis-specific Testis Transcript Y 1 (TTY1) mRNA, partial cds
2558	15122	27691	10.31	1.0E-55	X13111.1	NT	Human mRNA for HLA-A11E, a MHC class I molecule (major histocompatibility complex)
2580	15152	27718	4.92	1.0E-55	AB007869.2	NT	Homo sapiens mRNA for KIAA0408 protein, partial cds
2590	15152	27719	4.92	1.0E-55	AB007868.2	NT	Homo sapiens mRNA for KIAA0408 protein, partial cds
2842	15201	27774	1.88	1.0E-55	LS4057.1	NT	Homo sapiens CLP mRNA, partial cds
4061	18658	29120	4.09	1.0E-55	AL163267.2	NT	Homo sapiens chromosome 21 segment HS21C087
4362	18669	29417	1.24	1.0E-55	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
4837	17415		1.17	1.0E-55	N77281.1	EST_HUMAN	y44g03.r1 Scores fetal liver spleen 1NLS Homo sapiens cDNA clone IMAGE:245820 5'
4854	17529	29970	1.61	1.0E-55	AB037163.1	NT	Homo sapiens DSCR5b mRNA, complete cds
4954	17529	29971	1.61	1.0E-55	AB037163.1	NT	Homo sapiens DSCR5b mRNA, complete cds
5311	17673	30295	1.03	1.0E-55	8923125	NT	Homo sapiens hypothetical protein FLJ20128 (FLJ20128), mRNA
5689	18315	30814	8.13	1.0E-55	AF119856.1	NT	Homo sapiens PRO1851 mRNA, complete cds
6417	19020	31804	7.22	1.0E-55	11433046	NT	Homo sapiens hect domain and RLD 2 (HERC2), mRNA
6417	19020	31805	7.22	1.0E-55	11433046	NT	Homo sapiens hect domain and RLD 2 (HERC2), mRNA
7930	20472	33381	2.11	1.0E-55	11432894	NT	Homo sapiens discs, large (Drosophila) homolog 2 (chapsyn-110) (DLG2), mRNA
7930	20472	33382	2.11	1.0E-55	11432894	NT	Homo sapiens discs, large (Drosophila) homolog 2 (chapsyn-110) (DLG2), mRNA
8028	20568	33471	0.97	1.0E-55	AF224492.1	NT	Homo sapiens phospholipid scramblase 1 gene, complete cds
8028	20568	33472	0.97	1.0E-55	AF224492.1	NT	Homo sapiens phospholipid scramblase 1 gene, complete cds
10761	23314	36322	4.95	1.0E-55	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
10761	23314	36323	4.95	1.0E-55	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
11322	23020	36028	2.23	1.0E-55	U90950.1	NT	Human infant brain unknown product mRNA, complete cds
11342	23040	36049	1.68	1.0E-55	T10045.1	EST_HUMAN	seq1575 b4HB3MA C08-HAP-F1 Homo sapiens cDNA clone b4HB3MA-COT8-HAP-F161 5' similar to similar to Chinese Hamster DHFR-coamplified protein mRNA
11448	23998	36984	1.81	1.0E-55	10587821	NT	Homo sapiens DNA-binding protein (LOC56242), mRNA
7401	19828	32791	1.97	9.0E-56	BE378074.1	EST_HUMAN	601237702F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3609562 5'
2761	15316	27882	3.95	7.0E-56	H19934.1	EST_HUMAN	yn82g03.r1 Scores adult brain N2b5HB5Y Homo sapiens cDNA clone IMAGE:173044 5' similar to contains THR repetitive element:
7836	20148	33031	2.11	7.0E-56	AW361213.1	EST_HUMAN	RC1-CT0252-231089-013-b07 CT0252 Homo sapiens cDNA
7836	20148	33032	2.11	7.0E-56	AW361213.1	EST_HUMAN	RC1-CT0252-231089-013-b07 CT0252 Homo sapiens cDNA
1730	14321	26863	1.59	5.0E-56	AW897712.1	EST_HUMAN	RC3-BN0053-170200-011-R01 BN0053 Homo sapiens cDNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9088	21824	34559	0.8	5.0E-56	AW015507.1	EST_HUMAN	UI-H-B10p-aau-a-05-0-J1.s1 NCI_CGAP_Sub2 Homo sapiens cDNA clone IMAGE:2710544 3'
10289	22784		1.35	5.0E-56	W28189.1	EST_HUMAN	43c5 Human retina cDNA randomly primed sublibrary/Homo sapiens cDNA
12020	25048	30509	3.74	5.0E-56	H55099.1	EST_HUMAN	CHR220038 Chromosome 22 exon Homo sapiens cDNA clone C22_58 5'
30	12709	25168	22.23	4.0E-56	AF141349.1	NT	Homo sapiens beta-tubulin mRNA, complete cds
30	12709	25167	22.23	4.0E-56	AF141349.1	NT	Homo sapiens beta-tubulin mRNA, complete cds
2733	15288	27855	7.6	4.0E-56	4507728	NT	Homo sapiens tubulin, beta polypeptide (TUBB) mRNA
2733	15288	27856	7.6	4.0E-56	4507728	NT	Homo sapiens tubulin, beta polypeptide (TUBB) mRNA
2838	13183	25861	3.4	4.0E-56	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
8405	19008	31789	5.85	4.0E-56	AF217508.1	NT	Homo sapiens uncharacterized bone marrow protein BM031 mRNA, complete cds
8405	19008	31790	5.85	4.0E-56	AF217508.1	NT	Homo sapiens uncharacterized bone marrow protein BM031 mRNA, complete cds
10400	22894	35889	1.2	4.0E-56	AF043349.1	NT	Homo sapiens lymphocyte-specific protein 1 (LSP1) gene, LSP1-7 allele, partial cds
10803	23328	36335	8.31	4.0E-56	AI498068.1	EST_HUMAN	hm55g12.x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2163046 3'
10803	23328	36336	8.31	4.0E-56	AI498068.1	EST_HUMAN	hm55g12.x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2163046 3'
1366	13980	26507	2.12	3.0E-56	8924029	NT	Homo sapiens hypothetical protein PRO1304 (PRO1304), mRNA
1801	14391	28936	4.33	3.0E-56	6912743	NT	Homo sapiens 5'-3' exonuclease 2 (XRN2), mRNA
3159	15773	28240	1.88	3.0E-56	AA325826.1	EST_HUMAN	EST28889 Cerebellum II Homo sapiens cDNA 5' end
3159	15773	28241	1.88	3.0E-56	AA325826.1	EST_HUMAN	EST28889 Cerebellum II Homo sapiens cDNA 5' end
3903	16502		2.38	3.0E-56	AF055066.1	NT	Homo sapiens MHC class 1 region
3991	16589	29061	0.9	3.0E-56	BE393512.1	EST_HUMAN	601310203FT NIH_MGC 44 Homo sapiens cDNA clone IMAGE:3631848 5'
4477	17062	29512	0.82	3.0E-56	7657042	NT	Homo sapiens Down syndrome candidate region 1 (DSCR1), mRNA
4515	17099	29546	5.15	3.0E-56	AL163288.2	NT	Homo sapiens chromosome 21 segment HS21C068
4673	17255	29707	2.57	3.0E-56	5902085	NT	Homo sapiens superkiller viralicidic activity 2 (S. cerevisiae homolog)-like (SKIV2L), mRNA
4825	17500		1.14	3.0E-56	BE893572.1	EST_HUMAN	601438154FT NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3923100 5'
5280	17842	30269	0.6	3.0E-56	6912593	NT	Homo sapiens phosphatidylinositol transfer protein, beta (PITPNB), mRNA
5346	17842	30269	0.59	3.0E-56	6912593	NT	Homo sapiens phosphatidylinositol transfer protein, beta (PITPNB), mRNA
5863	18485	31208	1.4	3.0E-56	4759163	NT	Homo sapiens sparco/osteonectin, cwcw and kazal-like domains proteoglycan (testican) (SPOCK) mRNA
5863	18485	31209	1.4	3.0E-56	4759163	NT	Homo sapiens sparco/osteonectin, cwcw and kazal-like domains proteoglycan (testican) (SPOCK) mRNA
6956	19533	32358	6.22	3.0E-56	11421124	NT	Homo sapiens lysosomal-associated membrane protein 2 (LAMP2), mRNA
8750	21289	34209	5.2	3.0E-56	11418704	NT	Homo sapiens bone morphogenetic protein 5 (BMP5), mRNA
9727	22225	35202	0.86	3.0E-56	D63479.2	NT	Homo sapiens mRNA for KIAA0145 protein, partial cds
10375	22869	35862	1.63	3.0E-56	11434956	NT	Homo sapiens KIAA0317 gene product (KIAA0317), mRNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11184	23689	36749	6.31	3.0E-56	5902013	NT	Homo sapiens nuclear pore complex interacting protein (NPIP), mRNA
11194	23699	36750	6.31	3.0E-56	5902013	NT	Homo sapiens nuclear pore complex interacting protein (NPIP), mRNA
11883	24230	31002	1.3	3.0E-56	11434878	NT	Homo sapiens caveolin 3 (CAV3), mRNA
11883	24230	31003	1.3	3.0E-56	11434878	NT	Homo sapiens caveolin 3 (CAV3), mRNA
550	13181		2.35	2.0E-56	AA199818.1	EST_HUMAN	z552a08.s1 Stratiagene neuroepithelium (8937231) Homo sapiens cDNA clone IMAGE:845208 3'
762	15424	25878	1.37	2.0E-56	BE064386.1	EST_HUMAN	RC4-BT0310-110300-015-f10 BT0310 Homo sapiens cDNA
762	15424	25879	1.37	2.0E-56	BE064386.1	EST_HUMAN	RC4-BT0310-110300-015-f10 BT0310 Homo sapiens cDNA
2426	14994	27567	1.32	2.0E-56	M28061.1	NT	Human cGMP phosphodiesterase alpha subunit (CGPR-A) mRNA, complete cds
2426	14994	27568	1.32	2.0E-56	M28061.1	NT	Human cGMP phosphodiesterase alpha subunit (CGPR-A) mRNA, complete cds
3017	15633	28110	1.33	2.0E-56	AB037835.1	NT	Homo sapiens mRNA for KIAA1414 protein, partial cds
3358	15968		1.2	2.0E-56	AB009881.1	NT	Homo sapiens gene for activin receptor type IIB, complete cds
3586	16190	28674	1.34	2.0E-56	AV703184.1	EST_HUMAN	AV703184 ADB Homo sapiens cDNA clone ADBCFG10 5'
7147	19680	32521	1.9	2.0E-56	5730038	NT	Homo sapiens SET domain and menin transposase fusion gene (SETMAR) mRNA
1016	16328		12.77	1.0E-56	AF190930.1	NT	Macaca fascicularis protein tyrosine phosphatase (PRL-1) mRNA, complete cds
3737	16338	28803	1.67	1.0E-56	AW59833.1	EST_HUMAN	hg23c11.x1 NCI CGAP_GC6 Homo sapiens cDNA clone IMAGE:2946452 3'
3737	16338	28804	1.67	1.0E-56	AW59833.1	EST_HUMAN	hg23c11.x1 NCI CGAP_GC6 Homo sapiens cDNA clone IMAGE:2946452 3'
9866	22363		0.71	1.0E-56	AL163203.2	NT	Homo sapiens chromosome 21 segment H521C003
9961	22456	35439	1.57	1.0E-56	AW845987.1	EST_HUMAN	RC2-CT0163-220999-001-E02 CT0163 Homo sapiens cDNA
653	13276		1.74	9.0E-57	AW880885.1	EST_HUMAN	QV0-OT0033-070300-152-h03 OT0033 Homo sapiens cDNA
11099	23609	36649	1.92	9.0E-57	AF228497.1	NT	Homo sapiens serine protease 17 (KLK4) gene, complete cds
11099	23609	36650	1.92	9.0E-57	AF228497.1	NT	Homo sapiens serine protease 17 (KLK4) gene, complete cds
11397	23849	36915	2.01	9.0E-57	AB020981.1	NT	Homo sapiens mRNA for cyclin B2, complete cds
15	12994	25150	0.88	8.0E-57		NT	Homo sapiens hypothetical protein FLJ20371 (FLJ20371), mRNA
319	12973	25462	2.71	8.0E-57	AW816405.1	EST_HUMAN	QV4-ST0234-181199-037-f05 ST0234 Homo sapiens cDNA
917	13530	26048	8.64	8.0E-57	AW264599.1	EST_HUMAN	xr05d10.x1 NCI CGAP_Brn53 Homo sapiens cDNA clone IMAGE:2759251 3' similar to gb:U05875
1852	14440	26997	1.52	8.0E-57	AA498109.1	EST_HUMAN	INTERFERON-GAMMA RECEPTOR BETA CHAIN PRECURSOR (HUMAN);
3428	16036	28516	1	8.0E-57	4758279	NT	z551b12.r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:757151 5'
3428	16036	28517	1	8.0E-57	4758279	NT	Homo sapiens EphA4 (EPHA4) mRNA
5187	17752	30183	0.6	8.0E-57	BE289816.1	EST_HUMAN	600944440F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:2960864 5'
5450	24958	30631	3.17	8.0E-57	11416165	NT	Homo sapiens aconitase 2, mitochondrial (ACO2), mRNA
6590	19187	31989	12.5	8.0E-57	AB023177.1	NT	Homo sapiens mRNA for KIAA0960 protein, partial cds
6590	19187	31990	12.5	8.0E-57	AB023177.1	NT	Homo sapiens mRNA for KIAA0960 protein, partial cds
7729	20237	33128	2.72	8.0E-57	AB020644.1	NT	Homo sapiens mRNA for KIAA0837 protein, partial cds

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7729	20237	33129	2.72	8.0E-57	AB020844.1	NT	Homo sapiens mRNA for KIAA0837 protein, partial cds
11351	12694	25150	3.59	8.0E-57	8923349	NT	Homo sapiens hypothetical protein FLJ20371 (FLJ20371), mRNA
12271	24477	30838	1.41	8.0E-57	11548732	NT	Homo sapiens SH3-domain binding protein 1 (SH3BP1), mRNA
1281	13858	26375	1.16	7.0E-57	AJ003100.1	NT	Homo sapiens GYS2 gene, exon 14
3287	15898	28376	1.08	7.0E-57	7242158	NT	Homo sapiens NME7 (NME7), mRNA
3287	15898	28377	1.08	7.0E-57	7242158	NT	Homo sapiens NME7 (NME7), mRNA
3309	15920	28397	1	7.0E-57	8005979	NT	Homo sapiens Kruppel-like factor 8 (KLF8), mRNA
3946	16544	28011	2.3	7.0E-57	AF012872.1	NT	Homo sapiens phosphatidylinositol 4-kinase 230 (pi4K230) mRNA, complete cds
3946	16544	28012	2.3	7.0E-57	AF012872.1	NT	Homo sapiens phosphatidylinositol 4-kinase 230 (pi4K230) mRNA, complete cds
4524	17108		1.06	7.0E-57	AF020503.1	NT	Homo sapiens FRA3B common fragile region, diadenosine triphosphate hydrolase (FHIT) gene, exon 5
12634	24992		5.12	5.0E-57	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region, segment 1/2
3817	16417	28880	1.68	4.0E-57	AB026898.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
837	13453	25963	1.03	3.0E-57	4507798	NT	Homo sapiens ubiquitin protein ligase E3A (human papilloma virus E6-associated protein, Angelman syndrome) (UBE3A) mRNA
1376	13669		39.52	3.0E-57	AA202079.1	EST_HUMAN	nc1307.s1 NCI CGAP_Prl1 Homo sapiens cDNA clone IMAGE:1008037 similar to SW:RS10_HUMAN
2434	15001	27573	1.01	3.0E-57	AA348335.1	EST_HUMAN	P46783 40S RIBOSOMAL PROTEIN S10 ;
2727	15282	27849	0.93	3.0E-57	BE676622.1	EST_HUMAN	EST54770 Hippocampus II Homo sapiens cDNA 5' end
2727	15282	27849	0.93	3.0E-57	BE676622.1	EST_HUMAN	763b10.x1 NCI CGAP_CLL1 Homo sapiens cDNA clone IMAGE:3296443 3' similar to WP:Y47H9C.2
2727	15282	27850	0.93	3.0E-57	BE676622.1	EST_HUMAN	763b10.x1 NCI CGAP_CLL1 Homo sapiens cDNA clone IMAGE:3296443 3' similar to WP:Y47H9C.2
3518	16221	28698	0.93	3.0E-57	AF232708.1	NT	Homo sapiens cell-line tsA201a chloride ion current inducer protein (Cln) gene, complete cds
3760	16361	31559	60.31	3.0E-57	AW853964.1	EST_HUMAN	RC3-CT0254-110300-027-d10 CT0254 Homo sapiens cDNA
6180	18790	31648	1.34	3.0E-57	11225608	NT	Homo sapiens angiotensin I converting enzyme (peptidyl-dipeptidase A) 2 (ACE2), mRNA
6272	18880	31648	3.17	3.0E-57	BE796537.1	EST_HUMAN	601589896F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3944302 5'
8087	20628	33542	3.09	3.0E-57	W28130.1	EST_HUMAN	4266 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA
8111	20652	33560	2.27	3.0E-57	11545798	NT	Homo sapiens hypothetical protein FLJ11656 (FLJ11656), mRNA
8111	20652	33561	2.27	3.0E-57	11545798	NT	Homo sapiens hypothetical protein FLJ11656 (FLJ11656), mRNA
8223	20764	33681	0.61	3.0E-57	11427757	NT	Homo sapiens KIAA0648 gene product (KIAA0648), mRNA
8368	20908	33827	1.18	3.0E-57	J05262.1	NT	Human farnesyl pyrophosphate synthetase mRNA, complete cds
8792	21331	34255	4.05	3.0E-57	AU117659.1	EST_HUMAN	AU117659 HEMBA1 Homo sapiens cDNA clone HEMBA1001910 5'
9174	21751	34698	0.63	3.0E-57	11545798	NT	Homo sapiens hypothetical protein FLJ11656 (FLJ11656), mRNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9174	21751	34697	0.63	3.0E-57	11545798	NT	Homo sapiens hypothetical protein FLJ11656 (FLJ11656), mRNA
10787	23311	36318	3.02	3.0E-57	AW248374.1	EST_HUMAN	2820473.5prime NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2820473 5'
11890	25068	30513	7.99	3.0E-57	W23871.1	EST_HUMAN	zb45411.1 Soares fetal_lung_NbHL19W Homo sapiens cDNA clone IMAGE:306549 5'
12272	24982		1.69	3.0E-57	AW178575.1	EST_HUMAN	RCO-HT0112-080989-001-C08 HT0112 Homo sapiens cDNA
1480	14073	26612	0.88	2.0E-57	AI478904.1	EST_HUMAN	hm25c10.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2157618 3' similar to contains Alu repetitive element;
1548	14140	26673	0.96	2.0E-57	AF246219.1	NT	Homo sapiens SNARE protein kinase SNAK mRNA, complete cds
1548	14140	26674	0.96	2.0E-57	AF246219.1	NT	Homo sapiens SNARE protein kinase SNAK mRNA, complete cds
2444	15011	27583	1.15	2.0E-57	BE172526.1	EST_HUMAN	MRO-HT0559-010400-009-h10 HT0559 Homo sapiens cDNA
2756	15311	27877	4.79	2.0E-57	AA845419.1	EST_HUMAN	ek02b02.x1 Soares_parathyroid_tumor_NbHPA Homo sapiens cDNA clone IMAGE:1404747 3' similar to contains Alu repetitive element; contains element; contains element MER22 repetitive element;
3486	16091		2.28	2.0E-57	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
3605	16209	28688	0.71	2.0E-57	R07702.1	EST_HUMAN	ye98h01.1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:125809 5'
3605	16209	28689	0.71	2.0E-57	R07702.1	EST_HUMAN	ye98h01.1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:125809 5'
4004	16802	28076	0.62	2.0E-57	BE073284.1	EST_HUMAN	MRO-BT0551-060300-103-b03 BT0551 Homo sapiens cDNA
4608	17191	29637	8.02	2.0E-57	AL163283.2	NT	Homo sapiens chromosome 21 segment HS21C083
5849	18473		1.57	2.0E-57	AA016131.1	EST_HUMAN	ze31c05.r1 Soares retina N2b4HR Homo sapiens cDNA clone IMAGE:360584 5' similar to contains L1.t3 L1 repetitive element;
6184	18794		29.73	2.0E-57	BF115266.1	EST_HUMAN	7n80f04.x1 NCI_CGAP_Ov18 Homo sapiens cDNA clone IMAGE:3570986 3' similar to contains TAR1.t1
6307	18914	31698	0.73	2.0E-57	11431281	NT	MER22 repetitive element;
8586	21105	34024	1.22	2.0E-57	AF045452.1	NT	Homo sapiens small inducible cytokine subfamily A (Cys-Cys), member 22 (SCYA22), mRNA
9760	22258	35241	2.55	2.0E-57	AF057722.1	NT	Homo sapiens cell-line KG1 transcriptional regulatory protein p54 mRNA, complete cds
11150	23658	36701	2.05	2.0E-57	11424084	NT	Homo sapiens 17-beta-hydroxysteroid dehydrogenase IV (HSD17B4) gene, exons 3 and 4
11150	23658	36702	2.05	2.0E-57	11424084	NT	Homo sapiens hypothetical protein FLJ20041 (FLJ20041), mRNA
11192	23697	36746	1.84	2.0E-57	AJ245503.1	NT	Homo sapiens hypothetical protein FLJ20041 (FLJ20041), mRNA
11192	23697	36747	1.84	2.0E-57	AJ245503.1	NT	Homo sapiens partial mRNA for PEX5 related protein
8626	21165		3.5	1.0E-57	BE043031.1	EST_HUMAN	Homo sapiens partial mRNA for PEX5 related protein
12049	24333		6.35	1.0E-57	AW470791.1	EST_HUMAN	hs32a08.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3039062 3' similar to TR:O00248 O00248
5857	18480	31203	1.02	9.0E-58	AA297647.1	EST_HUMAN	hypothetical 9.3 KD PROTEIN;
12335	24518	30922	2.62	9.0E-58	BE365061.1	EST_HUMAN	hs33a06.x1 NCI_CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2875489 3' similar to contains THR.b3 THR repetitive element;
615	13242		3.67	8.0E-58	BE668715.1	EST_HUMAN	EST_T11348 Uterus Homo sapiens cDNA 5' end
							801309495F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3631000 5'
							801445948F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3850211 5'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
682	13306	25789	3.77	8.0E-58	AI798376.1	EST_HUMAN	tr34607.x1 NCI CGAP_Ov23 Homo sapiens cDNA clone IMAGE:2220181 3' similar to TR:O15475 O15475 UNNAMED HERV-H PROTEIN;
682	13308	25790	3.77	8.0E-58	AI798376.1	EST_HUMAN	tr34607.x1 NCI CGAP_Ov23 Homo sapiens cDNA clone IMAGE:2220181 3' similar to TR:O15475 O15475 UNNAMED HERV-H PROTEIN;
1897	14482	27041	2.82	8.0E-58	11434921	NT	Homo sapiens putative protein O-mannosyltransferase (POMT2), mRNA
1897	14482	27042	2.82	8.0E-58	11434921	NT	Homo sapiens putative protein O-mannosyltransferase (POMT2), mRNA
3003	15619		2.94	8.0E-58	7706132	NT	Homo sapiens DHHC1 protein (LOC51304), mRNA
10735	23260		6.42	7.0E-58	5174542	NT	Homo sapiens MAD5 box transcription enhancer factor 2, polypeptide B (myocyte enhancer factor 2B) (MEF2B), mRNA
10809	23332	36344	3.77	7.0E-58	AW504109.1	EST_HUMAN	UI-HF-BNO-ail-g-10-0-UI.r1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3079867 5'
10809	23332	36345	3.77	7.0E-58	AW504109.1	EST_HUMAN	UI-HF-BNO-ail-g-10-0-UI.r1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3079867 5'
2414	14982	27558	3.39	6.0E-58	AU130689.1	EST_HUMAN	AU130689 NT2RP3 Homo sapiens cDNA clone NT2RP3001263 5'
2926	15542	28017	1.26	6.0E-58	BE242150.1	EST_HUMAN	TCAAP1E1219 Pediatric acute myelogenous leukemia cell (FAB M1) Baylor-HGSC project=TCAA Homo sapiens cDNA clone TCAAP1219
2926	15542	28018	1.26	6.0E-58	BE242150.1	EST_HUMAN	TCAAP1E1219 Pediatric acute myelogenous leukemia cell (FAB M1) Baylor-HGSC project=TCAA Homo sapiens cDNA clone TCAAP1219
6318	18925	31702	1.15	6.0E-58	AF106911.1	NT	Homo sapiens chemokine MIP-2 gamma (MIP-2 gamma), mRNA, complete cds
10211	22708	35700	0.99	6.0E-58	11434748	NT	Homo sapiens protein tyrosine phosphatase, non-receptor type 21 (PTPN21), mRNA
12150	24393		1.87	6.0E-58	11526291	NT	Homo sapiens hypothetical protein FLJ20454 (FLJ20454), mRNA
322	12976	25464	3.26	5.0E-58	4507334	NT	Homo sapiens synaptotagmin 1 (SYNJ1), mRNA
739	13359	25853	5.81	5.0E-58	BE763984.1	EST_HUMAN	RC4-NT0057-160600-016-b05 NT0057 Homo sapiens cDNA
1236	13835	26350	3.59	5.0E-58	AW797948.1	EST_HUMAN	CM3-UM0043-240300-127-e07 UM0043 Homo sapiens cDNA
1236	13835	26351	3.59	5.0E-58	AW797948.1	EST_HUMAN	CM3-UM0043-240300-127-e07 UM0043 Homo sapiens cDNA
1237	13835	26350	2.7	5.0E-58	AW797948.1	EST_HUMAN	CM3-UM0043-240300-127-e07 UM0043 Homo sapiens cDNA
1237	13835	26351	2.7	5.0E-58	AW797948.1	EST_HUMAN	CM3-UM0043-240300-127-e07 UM0043 Homo sapiens cDNA
3365	15973	28450	4.17	5.0E-58	AA988183.1	EST_HUMAN	cr08e07.s1 NCI CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1603908 3'
4345	16932	26373	0.78	5.0E-58	AI636745.1	EST_HUMAN	ts89e07.x1 NCI CGAP_GC6 Homo sapiens cDNA clone IMAGE:2238468 3' similar to SW:PRO2_ACACA
5105	17677		1.12	5.0E-58	AW848834.1	EST_HUMAN	IL3-CT0214-090300-081-F06 CT0214 Homo sapiens cDNA
5811	18435		2.08	5.0E-58	11490282	NT	Homo sapiens placenta-specific 1 (PLAC1), mRNA
6325	18931	31707	5.73	5.0E-58	H23072.1	EST_HUMAN	ym51n07.r1 Soares infant brain T1NB Homo sapiens cDNA clone IMAGE:52071 5'
6528	19128	31922	0.87	5.0E-58	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
6597	19194	31999	1.24	5.0E-58	11421330	NT	Homo sapiens apical protein, Xenopus laevis-like (APXL), mRNA
7161	19693	32539	0.72	5.0E-58	4885400	NT	Homo sapiens holochochrome c synthase (cytochrome c heme-lyase) (HCCS), mRNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7910	20452	33359	9.67	5.0E-58	8922693	NT	Homo sapiens hypothetical protein FLJ10828 (FLJ10828), mRNA
8284	20835	33757	0.74	5.0E-58	AB048837.1	NT	Homo sapiens mRNA for KIAA1617 protein, partial cds
9263	21789	34739	0.72	5.0E-58	5231227	NT	Homo sapiens ribonuclease 6 precursor (RNASE6PL) mRNA
9263	21789	34740	0.72	5.0E-58	5231227	NT	Homo sapiens ribonuclease 6 precursor (RNASE6PL) mRNA
9771	22269	35253	0.74	5.0E-58	11430847	NT	Homo sapiens pre-mRNA splicing factor similar to S. cerevisiae Pip18 (PRP18), mRNA
10030	22525	35521	1.39	5.0E-58	AL163218.2	NT	Homo sapiens chromosome 21 segment HS21C018
10300	22794	35784	0.59	5.0E-58	AB014511.1	NT	Homo sapiens mRNA for KIAA0611 protein, partial cds
10300	22784	35785	0.59	5.0E-58	AB014511.1	NT	Homo sapiens mRNA for KIAA0611 protein, partial cds
11859	24987		6.17	5.0E-58	11526283	NT	Homo sapiens cat eye syndrome chromosome region, candidate 1 (CECR1), mRNA
12331	25018		1.81	5.0E-58	11426423	NT	Homo sapiens acetyl-Coenzyme A carboxylase alpha (ACACA), mRNA
12577	24873		1.34	5.0E-58	11418177	NT	Homo sapiens Ran GTPase activating protein 1 (RANGAP1), mRNA
12653	24725	30853	1.37	5.0E-58	11430460	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
12653	24725	30854	1.37	5.0E-58	11430460	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
396	13042	25532	5.55	4.0E-58	4502302	NT	Homo sapiens ATP synthase, H+ transporting, mitochondrial F1 complex, O subunit (oligomycin sensitivity conferring protein) (ATP5O) mRNA
829	13446	25953	1.76	4.0E-58	4504634	NT	Homo sapiens interleukin 10 receptor, beta (IL10RB), mRNA
1517	14109	26845	1.86	4.0E-58	4503848	NT	Homo sapiens coagulation factor IX (plasma thromboplastic component, Christmas disease, hemophilia B) (F9) mRNA
2811	15173	27741	1.13	4.0E-58	AF265555.1	NT	Homo sapiens ubiquitin-conjugating BIR-domain enzyme APOLLON mRNA, complete cds
2860	15219	27780	1.75	4.0E-58	U36251.1	NT	Human beta-prime-adaptin (BAM22) gene, exon 3
3367	15975	28452	1.62	4.0E-58	D16470.1	NT	Human mRNA, Xq terminal portion
3803	16403	28667	1.26	4.0E-58	5031660	NT	Homo sapiens EGF-like repeats and discoidin-like domains 3 (EDIL3), mRNA
11221	23724	36779	9.32	4.0E-58	11424059	NT	Homo sapiens E1B-55kDa-associated protein 5 (E1B-AP5), mRNA
357	13006		1.77	3.0E-58	R17879.1	EST_HUMAN	Yg10e02.r1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:31693 5'
1433	14028	26554	2.23	3.0E-58	4758981	NT	Homo sapiens peptide YY (PYY) mRNA
3059	15675		0.73	3.0E-58	R17879.1	EST_HUMAN	Yg10e02.r1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:31693 5'
3212	15824	28300	3.1	3.0E-58	BF569848.1	EST_HUMAN	602185789F1 NIH_MGC_45 Homo sapiens cDNA clone IMAGE:4309943 5'
3212	15824	28301	3.1	3.0E-58	BF569848.1	EST_HUMAN	602185789F1 NIH_MGC_45 Homo sapiens cDNA clone IMAGE:4309943 5'
6407	19010	31792	0.72	3.0E-58	BE089509.1	EST_HUMAN	QV0-BT0702-170400-194-109 BT0702 Homo sapiens cDNA
6572	19170	31987	0.98	3.0E-58	F07056.1	EST_HUMAN	HSC1T0081 normalized infant brain cDNA Homo sapiens cDNA clone c-1g08
6751	18344	32151	1.25	3.0E-58	AV712977.1	EST_HUMAN	AV712977 DCA Homo sapiens cDNA clone DCAAZG04 5'
978	13588	26103	8.92	2.0E-58	AF068624.1	NT	Homo sapiens 5-aminolevulinic synthase 2 (ALAS2) gene, complete cds

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1333	13927					EST_HUMAN	ba08b07.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823733 5' similar to gb:X69391.60S RIBOSOMAL PROTEIN L6 (HUMAN); gb:X81987.M.musculus mRNA for TAX responsive element binding protein (MOUSE);
5539	18171	30586	30.8	2.0E-58	BE208532.1	EST_HUMAN	xa08a09.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2587704 3'
5560	24745	30607	0.75	2.0E-58	AW074831.1	EST_HUMAN	601499961.F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3901911 5'
5560	24745	30637	4.01	2.0E-58	BE907186.1	EST_HUMAN	601499961.F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3901911 5'
6207	18817	31588	4.01	2.0E-58	BE907186.1	EST_HUMAN	UI-H-BW1-ams-g-11-QUI.s1 NCI CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3071060 3'
			1.28	2.0E-58	BF513486.1	EST_HUMAN	am57e02.x1 Johnston frontal cortex Homo sapiens cDNA clone IMAGE:1509674 3' similar to WP.ZK328.1 CE05065 UBIQUITIN CONJUGATING ENZYME; RECOVERIN SUBFAMILY OF EF-HAND CALCIUM BINDING PROTEIN;
6270	18878	31648	2.1	2.0E-58	AI124874.1	EST_HUMAN	YQ08H06.r1 Soares fetal liver spleen 1NFILS Homo sapiens cDNA clone IMAGE:196379 5'
6302	18909	31681	0.88	2.0E-58	R92587.1	EST_HUMAN	qm84c01.x1 NCI CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1895424 3'
7006	19504	32323	1	2.0E-58	AI291407.1	EST_HUMAN	Homo sapiens endocytic receptor Endo180 (ENDO180) mRNA, complete cds
7210	19741	32594	2.91	2.0E-58	AF134838.1	NT	Homo sapiens endocytic receptor Endo180 (ENDO180) mRNA, complete cds
7210	19741	32595	2.91	2.0E-58	AF134838.1	NT	Homo sapiens endocytic receptor Endo180 (ENDO180) mRNA, complete cds
10820	23152	36164	19.73	2.0E-58	BF307745.1	EST_HUMAN	60189081.2.F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4131891 5'
10844	23365	36381	2.67	2.0E-58	AW872641.1	EST_HUMAN	hm25f08.x1 NCI CGAP_Thy4 Homo sapiens cDNA clone IMAGE:3013671 3'
751	13371	25865	4.83	1.0E-58	M65134.1	NT	Human complement component C5 mRNA, 3' end
1106	13710	26219	5.91	1.0E-58	6274549	NT	Homo sapiens NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 9 (22kd, B22) (NDUFB9), mRNA
1372	13966	26492	1.24	1.0E-58	AW957182.1	EST_HUMAN	EST369252 MAGE resequences, MAGD Homo sapiens cDNA
1372	13966	26493	1.24	1.0E-58	AW957182.1	EST_HUMAN	EST369252 MAGE resequences, MAGD Homo sapiens cDNA
1440	14033	26561	2.04	1.0E-58	AJ238093.1	NT	Homo sapiens partial AF-4 gene, exons 2 to 7 and Alu repeat elements
1704	14297	26834	0.9	1.0E-58	BE466132.1	EST_HUMAN	hy10f08.x1 NCI CGAP_GC6 Homo sapiens cDNA clone IMAGE:3196835 3'
2828	15380	27950	1.17	1.0E-58	4759169	NT	Homo sapiens sterol regulatory element binding transcription factor 2 (SREBF2) mRNA
3590	16194	28679	0.62	1.0E-58	4758081	NT	Homo sapiens chondroitin sulfate proteoglycan 2 (versican) (CSPG2) mRNA
3590	16194	28680	0.62	1.0E-58	4758081	NT	Homo sapiens chondroitin sulfate proteoglycan 2 (versican) (CSPG2) mRNA
3783	16383	28948	0.57	1.0E-58	4507628	NT	Homo sapiens transition protein 1 (during histone to prolamine replacement) (TNPI1) mRNA
5106	17678	30117	6.64	1.0E-58	AI141063.1	EST_HUMAN	oz43h01.x1 Soares_NHIMPu_S1 Homo sapiens cDNA clone IMAGE:1678129 3'
6007	18627	31362	1.2	1.0E-58	BE061860.1	EST_HUMAN	RC1-BT0254-290100-015-e01 BT0254 Homo sapiens cDNA
6946	19523	32345	0.73	1.0E-58	11422031	NT	Homo sapiens hypothetical protein (LOC51280), mRNA
8803	21342	34268	0.7	1.0E-58	4505314	NT	Homo sapiens myomesin (M-protein) 2 (165kd) (MYOM2), mRNA
8912	21450	34371	0.93	1.0E-58	AV751001.1	EST_HUMAN	AV751001 NPC Homo sapiens cDNA clone NPCACH09 5'
9010	21547	34475	0.65	1.0E-58	AA412397.1	EST_HUMAN	z89f05.r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:730497 5'
9010	21547	34476	0.65	1.0E-58	AA412397.1	EST_HUMAN	z89f05.r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:730497 5'

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Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10089	22584	35577	0.55	1.0E-58	11432984	NT	Homo sapiens discs, large (Drosophila) homolog 2 (chapsyn-110) (DLG2), mRNA
11610	24053		5.43	1.0E-58	X63392.1	NT	H. sapiens immunoglobulin kappa light chain variable region L14
2273	14847	27423	16.05	8.0E-59	4507378	NT	Homo sapiens TATA box binding protein (TBP) mRNA
8121	20682	33572	2.08	8.0E-59	A1761963.1	EST_HUMAN	wh50406.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2384171 3'
190	15409		2.18	6.0E-59	BF035327.1	EST_HUMAN	601438531F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3862086 5'
8188	20728	33641	0.58	6.0E-59	A1750970.1	EST_HUMAN	cn06h02.y1 Normal Human Trabecular Bone Cells Homo sapiens cDNA clone NHTBC, cn06h02 random
1790	14380	26924	1.32	5.0E-59	AW157281.1	EST_HUMAN	au83h05.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2783865 3' similar to TR:O75786 O75786 GANGLIOSIDE-INDUCED DIFFERENTIATION ASSOCIATED PROTEIN 1.;
1790	14380	26925	1.32	5.0E-59	AW157281.1	EST_HUMAN	au83h05.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2783865 3' similar to
3161	15775	28243	7.81	5.0E-59	A807484.1	EST_HUMAN	TR:O75786 O75786 GANGLIOSIDE-INDUCED DIFFERENTIATION ASSOCIATED PROTEIN 1.;
4762	17343	28791	4.42	5.0E-59	X83497.1	NT	wt48c11.x1 Soares_NFL_I_GBC_S1 Homo sapiens cDNA clone IMAGE:2358836 3'
5886	18509	31235	0.81	5.0E-59	6005698	NT	H. sapiens DNA for ZNF80-linked ERV9 long terminal repeat
7064	18083	30440	8.32	5.0E-59	AW162304.1	EST_HUMAN	Homo sapiens ataxin 2 related protein (A2LP), mRNA
8741	21280	34203	1.35	5.0E-59	11421778	NT	element TAR1 repetitive element ;
9621	22121	35085	1.85	5.0E-59	AV762869.1	EST_HUMAN	Homo sapiens polymerase (RNA) III (DNA directed) (39kD) (RPC39), mRNA
10786	23310	36317	3.47	5.0E-59	11434908	NT	AV762869 MDS Homo sapiens cDNA clone MDSEIC12 5'
826	13443	25951	2.85	4.0E-59	D80006.1	NT	Homo sapiens hypothetical protein (LOC57143), mRNA
5728	18354	31058	1.22	4.0E-59	11034810	NT	Human mRNA for KIAA0184 gene, partial cds Homo sapiens catenin (cadherin-associated protein), delta 2 (neural plakophilin-related arm-repeat protein) (CTNND2), mRNA
12004	24917		5.54	4.0E-59	AF057720.1	NT	Homo sapiens 17-beta-hydroxysteroid dehydrogenase IV (HSD17B4) gene, promoter region and exon 1
10	12689		4.75	3.0E-59	AW965524.1	EST_HUMAN	EST377582 MAGE resequences, MAGI Homo sapiens cDNA
245	12904	25385	3.86	3.0E-59	7662247	NT	Homo sapiens KIAA0680 gene product (KIAA0680), mRNA
1748	14338	26884	8.2	3.0E-59	4505860	NT	Homo sapiens plasminogen activator, tissue (PLATa) mRNA
1748	14338	26885	8.2	3.0E-59	4505860	NT	Homo sapiens plasminogen activator, tissue (PLATa) mRNA
2174	14751	27320	7.15	3.0E-59	AB029035.1	NT	Homo sapiens mRNA for KIAA1112 protein, partial cds
2174	14751	27321	7.15	3.0E-59	AB029035.1	NT	Homo sapiens NF1-2 pseudogene, exon 17
2798	15477	27920	1.29	3.0E-59	AF232299.1	NT	h020171 Testis 1 Homo sapiens cDNA clone h02017 5' end
3074	15689	28161	0.77	3.0E-59	T18865.1	EST_HUMAN	h020171 Testis 1 Homo sapiens cDNA clone h02017 5' end
3074	15689	28162	0.77	3.0E-59	T18865.1	EST_HUMAN	h020171 Testis 1 Homo sapiens cDNA clone h02017 5' end
3163	15777	28247	4.67	3.0E-59	4502014	NT	Homo sapiens A kinase (PRKA) anchor protein 1 (AKAP1), mRNA

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3163	15777	28248	4.67	3.0E-59	4502014	NT	Homo sapiens A kinase (PRKA) anchor protein 1 (AKAP1), mRNA
3897	16486	28958	1.12	3.0E-59	4508044	NT	Homo sapiens zona pellucida glycoprotein 2 (sperm receptor) (ZP2), mRNA
4798	17374	28828	0.98	3.0E-59	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
4987	17541	28884	1.33	3.0E-59	7427522	NT	Homo sapiens protein tyrosine phosphatase, receptor type, T (PTPRT), mRNA
6369	18973	31751	2.1	3.0E-59	8924074	NT	Homo sapiens hypothetical protein PRO1741 (PRO1741), mRNA
7395	19920	32785	1.87	3.0E-59	5454137	NT	Homo sapiens nuclear receptor co-repressor 1 (NCOR1), mRNA
7872	20414	33321	1.26	3.0E-59	X12556.1	NT	Human mRNA for dbl proto-oncogene
7872	20414	33322	1.26	3.0E-59	X12556.1	NT	Human mRNA for dbl proto-oncogene
9957	22452	35433	1.04	3.0E-59	X70251.1	NT	H. sapiens CKII-alpha gene
9957	22452	35434	1.04	3.0E-59	X70251.1	NT	H. sapiens CKII-alpha gene
11880	24291		1.26	3.0E-59	11417868	NT	Homo sapiens gamma-glutamyltransferase-like activity 1 (GGTLA1), mRNA
12130	24386		9.09	3.0E-59	11417868	NT	Homo sapiens gamma-glutamyltransferase-like activity 1 (GGTLA1), mRNA
6044	18663	31402	0.98	2.0E-59	BF509383.1	EST_HUMAN	UI-H-B14-acy-b-02-0-UI.st NCL CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3086522 3'
6044	18663	31403	0.98	2.0E-59	BF509383.1	EST_HUMAN	UI-H-B14-acy-b-02-0-UI.st NCL CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3086522 3'
9555	22055		5.27	2.0E-59	AA309774.1	EST_HUMAN	EST180633 Jurkat T-cells V Homo sapiens cDNA 5' end
10419	22913		1.34	2.0E-59	BF365554.1	EST_HUMAN	RCO-NT0036-100700-032-a07 NT0036 Homo sapiens cDNA
10710	23238	36252	2.49	2.0E-59	AW410698.1	EST_HUMAN	fh07h04.x1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:2961654 5'
10710	23238	36253	2.49	2.0E-59	AW410698.1	EST_HUMAN	fh07h04.x1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:2961654 5'
11879	24228	31046	5.76	2.0E-59	AI631809.1	EST_HUMAN	w336c12.x1 NCL CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2300182 3' similar to TR:Q86542
12437	24943	30621	2.86	2.0E-59	L11645.1	NT	Q86542 RTVL-H PROTEIN; contains LTR7 b1 LTR7 repetitive element;
174	12837		18.31	1.0E-59	BE268411.1	EST_HUMAN	Homo sapiens alpha-tubulin mRNA, complete cds
2516	15080	27652	1.02	1.0E-59	AI139341.1	EST_HUMAN	601176757F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3531927 5'
2516	15080	27653	1.02	1.0E-59	AI139341.1	EST_HUMAN	qc21c08.x1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:1710254 3'
2649	15208		1.45	1.0E-59	AA748468.1	EST_HUMAN	qc21c08.x1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:1710254 3'
7563	20080	32956	1.98	1.0E-59	AJ130894.1	NT	oe56h11.s1 NCL CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1309029 3' similar to TR:Q13537
7703	20212	33100	0.93	1.0E-59	BE256814.1	EST_HUMAN	Q13537 MER37 TRANSPOSABLE ELEMENT, COMPLETE CONSENSUS SEQUENCE. ;
7703	20212	33101	0.93	1.0E-59	BE256814.1	EST_HUMAN	Homo sapiens mRNA for transcription factor
9307	21907	34855	1.2	1.0E-59	11419630	NT	601111951F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3352692 5'
9522	22022	34979	0.82	1.0E-59	11428849	NT	601111951F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3352692 5'
9522	22022	34980	0.82	1.0E-59	11428849	NT	Homo sapiens zinc finger protein 275 (ZNF275), mRNA
10734	20080	32956	9.52	1.0E-59	AJ130894.1	NT	Homo sapiens 3-hydroxyisobutyryl-Coenzyme A hydrolase (HIBCH), mRNA
795	13413	25917	1.28	8.0E-60	AW977845.1	EST_HUMAN	Homo sapiens 3-hydroxyisobutyryl-Coenzyme A hydrolase (HIBCH), mRNA
							Homo sapiens mRNA for transcription factor
							EST:389849 MAGE resequences, MAGE Homo sapiens cDNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1520	14112	26848	3.21	8.0E-60	4759159	NT	Homo sapiens small nuclear ribonucleoprotein D3 polypeptide (18kD) (SNRPD3) mRNA
2216	14791	27364	1.95	8.0E-60	5174656	NT	Homo sapiens differentiation-related gene 1 (nickel-specific induction protein) (RTP) mRNA
2216	14791	27365	1.95	8.0E-60	5174656	NT	Homo sapiens differentiation-related gene 1 (nickel-specific induction protein) (RTP) mRNA
6135	18749	31506	1.01	8.0E-60	AB029004.1	NT	Homo sapiens mRNA for KIAA1081 protein, partial cds
6628	19224	32029	1.85	8.0E-60	S83192.1	NT	hyaluronan-binding protein=hepatocyte growth factor activator homolog [human, plasma, mRNA, 2408 nt]
7884	20195	33083	0.78	8.0E-60	11420841	NT	Homo sapiens phosphate cytidylyltransferase 1, choline, beta isoform (PCYT1B), mRNA
7806	20448	33355	2.66	8.0E-60	X17033.1	NT	Human mRNA for integrin alpha-2 subunit
8869	21408	34332	4.03	8.0E-60	11428949	NT	Homo sapiens S-antigen, retina and pineal gland (arrestin) (SAG), mRNA
9392	21815	34764	0.98	8.0E-60	11417118	NT	Homo sapiens KIAA0433 protein (KIAA0433), mRNA
9392	21815	34765	0.98	8.0E-60	11417118	NT	Homo sapiens KIAA0433 protein (KIAA0433), mRNA
10465	22959	35989	0.68	8.0E-60	5453997	NT	Homo sapiens RAN binding protein 7 (RANBP7), mRNA
10712	23240	36255	5.93	8.0E-60	AL163204.2	NT	Homo sapiens chromosome 21 segment: HS21C004
10712	23240	36256	5.93	8.0E-60	AL163204.2	NT	Homo sapiens chromosome 21 segment: HS21C004
784	13403	25907	12.12	7.0E-60	AF055086.1	NT	Homo sapiens MHC class 1 region
785	13403	25907	52.6	7.0E-60	AF055086.1	NT	Homo sapiens MHC class 1 region
848	13464	25972	1.28	7.0E-60	4504634	NT	Homo sapiens interleukin 10 receptor, beta (LTORB), mRNA
2173	14750	27319	1.95	7.0E-60	AF077189.1	NT	Homo sapiens cullin 4A (CUL4A) mRNA, complete cds
4258	18844	29293	2.74	7.0E-60	4505483	NT	Homo sapiens ornithine decarboxylase 1 (ODC1) mRNA
9328	21842	34794	3.6	7.0E-60	H58041.1	EST_HUMAN	yr1204.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:205087 5' similar to contains LTR5 repetitive element;
11243	23773	36830	1.87	7.0E-60	H58041.1	EST_HUMAN	yr1204.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:205087 5' similar to contains LTR5 repetitive element;
8376	20916		7.96	8.0E-60	H52456.1	EST_HUMAN	yr78h09.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:201953 5' similar to contains OFR repetitive element;
87	12763	25245	1.13	5.0E-60	AI807917.1	EST_HUMAN	wf52c07.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2359212 3'
87	12763	25246	1.13	5.0E-60	AI807917.1	EST_HUMAN	wf52c07.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2359212 3'
3000	15816		1.47	4.0E-60	AA298037.1	EST_HUMAN	EST11498 Uterus Homo sapiens cDNA 5' and similar to similar to retrovirus-related pol
7390	19916	32779	0.7	4.0E-60	BF196068.1	EST_HUMAN	hr81f05.x1 NCI_QCAP_Kid11 Homo sapiens cDNA clone IMAGE:3134913 3' similar to SW:RHOP_MOUSE
9034	21591		0.62	4.0E-60	AL163278.2	NT	Q61085 GTP-RHO BINDING PROTEIN 1;
1899	14484	27044	5.26	3.0E-60	BE562611.1	EST_HUMAN	Homo sapiens chromosome 21 segment: HS21C078
1899	14484	27045	5.26	3.0E-60	BE562611.1	EST_HUMAN	601330446F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3690395 5'
1910	14495		2.4	3.0E-60	6031190	NT	601330446F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3690395 5'

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Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4556	17139	29587	1.88	3.0E-60	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
5822	18446	31168	2.04	3.0E-60	AW836198.1	EST_HUMAN	RC3-LT0023-200100-012-a01 LT0023 Homo sapiens cDNA
7034	18054	30477	1	3.0E-60	A1782814.1	EST_HUMAN	cl60n11.y6 NCI CGAP_Kid3 Homo sapiens cDNA clone IMAGE:1534053 5' similar to SW:UDP_MOUSE
8341	20882	33802	5.3	3.0E-60	5174844	NT	P52824 URIDINE PHOSPHORYLASE;
8341	20882	33803	5.3	3.0E-60	5174844	NT	Homo sapiens proline dehydrogenase (proline oxidase) (PRODH) mRNA
							Homo sapiens proline dehydrogenase (proline oxidase) (PRODH) mRNA
8519	21058	33981	0.51	3.0E-60	AID40235.1	EST_HUMAN	ox56d08.x1 Soares_NHMPu_S1 Homo sapiens cDNA clone IMAGE:1660337 3' similar to
8677	21216	34136	4.75	3.0E-60	5174844	NT	SW_FORM_MOUSE Q05960 FORMIN;
12520	24680		1.71	3.0E-60	AA485286.1	EST_HUMAN	Homo sapiens proline dehydrogenase (proline oxidase) (PRODH) mRNA
33	12712	25171	2.84	2.0E-60	AY008285.1	NT	ab07h04.r1 Strategene lung (#837210) Homo sapiens cDNA clone IMAGE:840151 5' similar to contains
1470	14062	26597	2.86	2.0E-60	Z11684.1	NT	LTR10.t1 LTR10 repetitive element;
1759	14349	28893	1.24	2.0E-60	M24603.1	NT	Homo sapiens solute carrier (SLC25A18) mRNA, complete cds; nuclear gene for mitochondrial product
3638	16241	28717	0.72	2.0E-60	4757887	NT	H. sapiens 41kDa protein kinase related to rat ERK2
3987	16595	29056	0.78	2.0E-60	AF231919.1	NT	Human bcr protein mRNA, 5' end
4203	16792		0.65	2.0E-60	BF513458.1	EST_HUMAN	Homo sapiens v-raf murine sarcoma viral oncogene homolog B1 (BRAF) mRNA
8443	19045	31833	0.94	2.0E-60	A1781952.1	EST_HUMAN	Homo sapiens chromosome 21 unknown mRNA
8816	19215	32020	1.65	2.0E-60	AF004877.1	NT	UI-H-BW1-ams-e-05-0-UI.s1 NCI CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3070952 3'
8816	19407	32224	0.89	2.0E-60	AF157476.1	NT	repetitive element;
6934	18042	30486	2.08	2.0E-60	4503044	NT	Homo sapiens pro-alpha 2(I) collagen (COL1A2) gene, complete cds
6934	18042	30487	2.08	2.0E-60	4503044	NT	Homo sapiens DNA polymerase zeta catalytic subunit (REV3) mRNA, complete cds
7164	18686	32542	8.14	2.0E-60	AA311159.1	EST_HUMAN	Homo sapiens corticotropin releasing hormone receptor 2 (CRHR2) mRNA
7164	18686	32543	8.14	2.0E-60	AA311159.1	EST_HUMAN	EST181949 Jurkat T-cells V Homo sapiens cDNA 5' end similar to similar to prothymosin, alpha
7828	20140		1.05	2.0E-60	BF512808.1	EST_HUMAN	EST181949 Jurkat T-cells V Homo sapiens cDNA 5' end similar to similar to prothymosin, alpha
7947	20489	33398	1.05	2.0E-60	X85597.1	EST_HUMAN	UI-H-BW1-ams-e-02-0-UI.s1 NCI CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3071210 3'
8801	21340	34287	3.38	2.0E-60	L36033.1	NT	HS188EST human adult testis Homo sapiens cDNA clone CAM tEST15
							Human pre-B cell stimulating factor homologue (SDF1b) mRNA, complete cds
9888	22385	35362	2.67	2.0E-60	11981659	NT	Homo sapiens sema domain, transmembrane domain (TM), and cytoplasmic domain, (semaphorin) 6A
9888	22385	35363	2.67	2.0E-60	11981659	NT	(SEMAP6A), mRNA
12188	24407		3.98	2.0E-60	11418192	NT	Homo sapiens sema domain, transmembrane domain (TM), and cytoplasmic domain, (semaphorin) 6A
							(SEMAP6A), mRNA
							Homo sapiens non-histone chromosome protein 2 (S. cerevisiae)-like 1 (NHP2L1), mRNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12309	24908		1.71	2.0E-60	AF068757.1	NT	Homo sapiens somatostatin receptor subtype 3 (SSTR3) gene, 5' flanking region and partial cds
12311	24503		1.88	2.0E-60	11418088	NT	Homo sapiens similar to HSPC022 protein (H. sapiens) (LOC63504), mRNA
12329	24515		1.95	2.0E-60	AB011399.1	NT	Homo sapiens gene for AF-6, complete cds
548	13179	25657	0.92	1.0E-60	BE178586.1	EST_HUMAN	PM3-H10605-270200-001-e06 HT0605 Homo sapiens cDNA
3970	16568	28037	0.95	1.0E-60	AU143389.1	EST_HUMAN	AU143389 Y79AA1 Homo sapiens cDNA clone Y79AA1001854 5'
5091	17684	30104	1.32	1.0E-60	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
7889	20431	33340	0.73	1.0E-60	BE064410.1	EST_HUMAN	RC4-BT0311-141199-011-h06 BT0311 Homo sapiens cDNA
							nc04e12.1 NCI_CGAP_P11 Homo sapiens cDNA clone IMAGE:1007182 similar to contains L1.11 L1
8890	21229		2.93	1.0E-60	AA244041.1	EST_HUMAN	repetitive element
8717	21258	34178	1.61	1.0E-60	AV754081.1	EST_HUMAN	AV754081 TP Homo sapiens cDNA clone TPGAED05 5'
1138	13741	28250	2.37	9.0E-61	AU119344.1	EST_HUMAN	AU119344 HEMBA1 Homo sapiens cDNA clone HEMBA1005583 5'
2894	15251	27821	1.11	8.0E-61	AW006478.1	EST_HUMAN	W05b10.x1 NCI_CGAP_Co3 Homo sapiens cDNA clone IMAGE:2506555 3'
2894	15251	27822	1.11	8.0E-61	AW006478.1	EST_HUMAN	W05b10.x1 NCI_CGAP_Co3 Homo sapiens cDNA clone IMAGE:2506555 3'
2878	15594		2.53	8.0E-61	X57147.1	NT	Human endogenous retrovirus pHE.1 (ERV9)
7836	20378	33284	0.79	8.0E-61	AA583968.1	EST_HUMAN	nm5906.s1 NCI_CGAP_Lar1 Homo sapiens cDNA clone IMAGE:1088218 3'
133	12789	25286	0.99	7.0E-61	7708870	NT	Homo sapiens PXR2b protein (PXR2b), mRNA
133	12789	25287	0.99	7.0E-61	7708870	NT	Homo sapiens PXR2b protein (PXR2b), mRNA
287	12943	25428	3.39	6.0E-61	BE409310.1	EST_HUMAN	601300938F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3635480 5'
844	13480	25869	2.13	6.0E-61	BE409310.1	EST_HUMAN	601300938F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3635480 5'
1366	13980	26485	13.81	6.0E-61	AF119860.1	NT	Homo sapiens PRO2014 mRNA, complete cds
1672	14264	26798	0.91	6.0E-61	BE257400.1	EST_HUMAN	601109238F1 NIH_MGC_18 Homo sapiens cDNA clone IMAGE:3350145 5'
1689	14281	26816	2.23	6.0E-61	AA586033.1	EST_HUMAN	nm68h09.s1 NCI_CGAP_Lar1 Homo sapiens cDNA clone IMAGE:1088897 3'
2172	14749	27318	0.93	6.0E-61	AY008285.1	NT	Homo sapiens solute carrier (SLC25A18) mRNA, complete cds; nuclear gene for mitochondrial product
3347	15957	28433	11.6	6.0E-61	AU130889.1	EST_HUMAN	AU130889 NT2RP3 Homo sapiens cDNA clone NT2RP3001263 5'
6182	18792	31361	3.08	6.0E-61	S79249.1	NT	Ig-beta/B29=CD70b (alternatively spliced) [human, B cells, mRNA Partial, 375 nt]
7380	19908	32771	1.71	6.0E-61	U24498.1	NT	Human autosomal dominant polycystic kidney disease protein 1 (PKD1) gene
7614	20127	33004	1.95	6.0E-61	AF035737.1	NT	Homo sapiens general transcription factor 2-(GTF2) mRNA, complete cds
12065	13460	25869	1.38	6.0E-61	BE409310.1	EST_HUMAN	601300938F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3635480 5'
236	12866	25378	2.06	5.0E-61	8922990	NT	Homo sapiens hypothetical protein FLJ11316 (FLJ11316), mRNA
236	12868	25380	2.06	5.0E-61	8922990	NT	Homo sapiens hypothetical protein FLJ11316 (FLJ11316), mRNA
382	13029	25517	0.81	5.0E-61	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
1718	14310	26849	2.36	5.0E-61	4506008	NT	Homo sapiens protein phosphatase 1, regulatory subunit 10 (PPP1R10) mRNA
3071	15888	28158	1.9	5.0E-61	AL163279.2	NT	Homo sapiens chromosome 21 segment HS21C078

Table 4

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4053	16650		1.91	5.0E-61	AJ228041.1	NT	Homo sapiens 959 kb contig between AML1 and CBR1 on chromosome 21q22; segment 1/3
5144	13029	25517	0.69	5.0E-61	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
11856	24215		4.95	4.0E-61	AV731140.1	EST_HUMAN	Homo sapiens cDNA clone HTFAR801 5'
4292	16878	29325	0.98	3.0E-61	BE396279.1	EST_HUMAN	601309785F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3631220 5'
8360	20900	33821	0.63	3.0E-61	AF150190.1	EST_HUMAN	AF150190 Human mRNA from cd34+ stem cells Homo sapiens cDNA clone CBDAGB04
8629	21168	34083	0.51	3.0E-61	AA301233.1	EST_HUMAN	EST14323 Testis tumor Homo sapiens cDNA 5' end
8629	21168	34084	0.51	3.0E-61	AA301233.1	EST_HUMAN	EST14323 Testis tumor Homo sapiens cDNA 5' end
524	13158	25838	1.29	2.0E-61	8922829	NT	Homo sapiens hypothetical protein FLJ11028 (FLJ11028), mRNA
1254	13851	26368	1.98	2.0E-61	BE168410.1	EST_HUMAN	QV3-HT0513-080400-147-d01 HT0513 Homo sapiens cDNA
1254	13851	26369	1.98	2.0E-61	BE168410.1	EST_HUMAN	QV3-HT0513-080400-147-d01 HT0513 Homo sapiens cDNA
1705	14298	26835	1.22	2.0E-61	N53039.1	EST_HUMAN	yw53d11.s1 Scars fetal liver spleen 1NFS Homo sapiens cDNA clone IMAGE:246453 3' similar to
2667	15225		1.34	2.0E-61	N39397.1	EST_HUMAN	gb:U25444 60S RIBOSOMAL PROTEIN L35A (HUMAN); y03111.1 Scars melanocyte 2NHHM Homo sapiens cDNA clone IMAGE:270189 5'
6557	19155	31951	0.85	2.0E-61	11426166	NT	Homo sapiens ATPase, H+ transporting, lysosomal (vacuolar proton pump) non-catalytic accessory protein 1A (110/116KD) (ATP9A1A), mRNA
8945	21483	34406	1.01	2.0E-61	AV694317.1	EST_HUMAN	AV694317 GKC Homo sapiens cDNA clone GKCELG08 5'
9481	21880		1.55	2.0E-61	AB011108.1	NT	Homo sapiens mRNA for KIAA0536 protein, partial cds
9836	22334	35316	1.59	2.0E-61	AW500286.1	EST_HUMAN	UI-HF-BN0-akd-f-12-0-UI.r1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3076774 5'
10149	22644	35636	1.99	2.0E-61	11421778	NT	Homo sapiens polymerase (RNA) III (DNA directed) (39KD) (RPC39), mRNA
10764	23288		9.83	2.0E-61	11419729	NT	Homo sapiens ribosomal protein L44 (RPL44), mRNA
460	13094		0.91	1.0E-61	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
805	13422	25928	1.25	1.0E-61	5453829	NT	Homo sapiens origin recognition complex, subunit 2 (yeast homolog)-like (ORC2L) mRNA
1443	14036	26565	0.98	1.0E-61	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
1898	14483	27043	3.87	1.0E-61	8005983	NT	Homo sapiens zona pellucida glycoprotein 3A (sperm receptor) (ZP3A), mRNA
2238	14813	27385	1.55	1.0E-61	AW827281.1	EST_HUMAN	zn11b09.y1 NCI_CGAP_LJ5 Homo sapiens cDNA clone IMAGE:2693369 5' similar to contains element
3422	16030	28511	0.98	1.0E-61	7662319	NT	MSR1 repetitive element;
4534	17118	29564	1.48	1.0E-61	4759249	NT	Homo sapiens KIAA0806 gene product (KIAA0806), mRNA
4534	17118	29565	1.48	1.0E-61	4759249	NT	Homo sapiens TRAF family member-associated NFKB activator (TANK) mRNA
4982	17556	29898	10.61	1.0E-61	AW298181.1	EST_HUMAN	Homo sapiens TRAF family member-associated NFKB activator (TANK) mRNA
4982	17556	29899	10.61	1.0E-61	AW298181.1	EST_HUMAN	UI-H-BW0-git-b-08-0-UI.s1 NCI_CGAP_Sub6 Homo sapiens cDNA clone IMAGE:2732871 3'
5868	18490	31216	0.99	1.0E-61	7662303	NT	UI-H-BW0-git-b-08-0-UI.s1 NCI_CGAP_Sub6 Homo sapiens cDNA clone IMAGE:2732871 3'
6043	18962	31401	1.17	1.0E-61	11416891	NT	Homo sapiens KIAA0783 gene product (KIAA0783), mRNA
6981	19479	32300	8.17	1.0E-61	M30135.1	NT	Homo sapiens survival of motor neuron 1, telomeric (SMN1), mRNA Human P40 T-cell and mast cell growth factor (HP40) gene, complete cds

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7148	19881	32522	0.73	1.0E-61	4759171	NT	Homo sapiens SC35-interacting protein 1 (SRRP129), mRNA
7242	19771	32627	1.54	1.0E-61	8923130	NT	Homo sapiens hypothetical protein FLJ20128 (FLJ20128), mRNA
7242	19771	32628	1.54	1.0E-61	8923130	NT	Homo sapiens hypothetical protein FLJ20128 (FLJ20128), mRNA
8075	20617	33531	6.29	1.0E-61	11034840	NT	Homo sapiens growth hormone releasing hormone (GHRH), mRNA
8255	20766	33713	3.19	1.0E-61	AF224669.1	NT	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
9208	21723		2.29	1.0E-61	AW999726.1	EST_HUMAN	MRO-BN0070-040400-010-H01 BN0070 Homo sapiens cDNA
9279	21805	34756	1.1	1.0E-61	11419280	NT	Homo sapiens cadherin 18 (CDH18), mRNA
9842	22437	35414	5.78	1.0E-61	11428892	NT	Homo sapiens KIAA0971 protein (KIAA0971), mRNA
10514	23052	36083	2.82	1.0E-61	11425578	NT	Homo sapiens actinin, alpha 4 (ACTN4), mRNA
11751	24986		1.58	1.0E-61	AB011399.1	NT	Homo sapiens gene for AF-8, complete cds
11763	24955	30629	3.23	1.0E-61	11430460	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
11793	24955	30630	3.23	1.0E-61	11430460	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
12173	24412	30945	1.61	1.0E-61	M20809.1	NT	Human kappa-immunoglobulin germline pseudogene (Chr1) variable region (subgroup V kappa I)
12494	24622	30891	17.77	1.0E-61	11418127	NT	Homo sapiens GTP binding protein 1 (GTPBP1), mRNA
10259	22754	35742	1.82	9.0E-62	BE084386.1	EST_HUMAN	RC4-BT0310-110300-015-110 BT0310 Homo sapiens cDNA
4849	17231	29688	1.03	8.0E-62	AA830420.1	EST_HUMAN	cc68h11.s1 NCL CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1354725 3' similar to SW:POL_MLVK
12652	24724		1.59	8.0E-62	AA768981.1	EST_HUMAN	P31795 POL POLYPROTEIN
1146	13749	26258	1.31	7.0E-62	AV714334.1	EST_HUMAN	nz75g01.s1 NCL CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1301328 3'
3554	16158	28641	0.7	7.0E-62	P17480	SWISSPROT	AV714334 DCB Homo sapiens cDNA clone DCBAMA08 5'
6075	18682	31438	0.96	7.0E-62	11427965	NT	NUCLEOLAR TRANSCRIPTION FACTOR 1 (UPSTREAM BINDING FACTOR 1) (UBF-1) (AUTOANTIGEN NOR-90)
11229	23760	36816	5.72	7.0E-62	A1208681.1	EST_HUMAN	Homo sapiens hypothetical protein (FLJ20261), mRNA
3029	15645		1.6	8.0E-62	U09410.1	NT	qg56a04.x1 Soares testis NHT Homo sapiens cDNA clone IMAGE:1839150 3' similar to TR:O15103
3431	16039		4.97	6.0E-62	11418255	NT	O15103 HYPOTHETICAL 27.3 KD PROTEIN ; Human zinc finger protein ZNF131 mRNA, partial cds
7621	20134	33011	3.43	6.0E-62	A1762801.1	EST_HUMAN	Homo sapiens CGI-58 protein (CGI-58), mRNA
7621	20134	33012	3.43	6.0E-62	A1762801.1	EST_HUMAN	w04d02.x1 NCL CGAP_GCB1 Homo sapiens cDNA clone IMAGE:2389251 3'
8030	20572		0.75	6.0E-62	AW501124.1	EST_HUMAN	w04d02.x1 NCL CGAP_GCB1 Homo sapiens cDNA clone IMAGE:2389251 3'
8200	20741	33654	1.35	6.0E-62	11431139	NT	U1HF-BP0p-aii-d-08-q-J1.r1 NIH_MGC_51 Homo sapiens cDNA clone IMAGE:3072833 5'
9276	21802	34752	3.92	6.0E-62	AW814393.1	EST_HUMAN	Homo sapiens CGI-18 protein (LOC51008), mRNA
							MR3-ST0203-130100-025-e09 ST0203 Homo sapiens cDNA
							wx51e07.x1 NCL CGAP_Lu28 Homo sapiens cDNA clone IMAGE:2547204 3' similar to SW:GG95_HUMAN
441	13074	25569	1.99	5.0E-62	A1950528.1	EST_HUMAN	Q08379 GOLGIN-95, contains element MER22 repetitive element ;

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Table 4
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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2451	15018	27589	3	5.0E-62	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
2451	15018	27590	3	5.0E-62	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
2626	15188	27755	0.87	5.0E-62	U39487.1	NT	Human xanthine dehydrogenase/oxidase mRNA, complete cds
2626	15188	27756	0.87	5.0E-62	U39487.1	NT	Human xanthine dehydrogenase/oxidase mRNA, complete cds
3486	16073	28546	2.52	5.0E-62	4506758	NT	Homo sapiens ryanodine receptor 3 (RYR3) mRNA
4421	17006	29449	2.23	5.0E-62	AA431093.1	EST_HUMAN	zsf78e09.s1 Soares, testis_NHT Homo sapiens cDNA clone IMAGE:782344 3' similar to SW:NRDC_RAT
4657	17239		0.95	5.0E-62	AW905887.1	EST_HUMAN	P47245 NARDILYSIN ;
8485	21024	33941	0.64	5.0E-62	4506758	NT	Homo sapiens ryanodine receptor 3 (RYR3) mRNA
9436	21962	34911	5.85	5.0E-62	AW410687.1	EST_HUMAN	fn07g09.x1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:2861616 5'
11144	23652	36693	2.54	5.0E-62	11425574	NT	Homo sapiens muscle specific gene (M9), mRNA
11144	23652	36694	2.54	5.0E-62	11425574	NT	Homo sapiens muscle specific gene (M9), mRNA
873	13488	26003	4.05	4.0E-62	AW161479.1	EST_HUMAN	au71d03.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2781701 5' similar to gb:M37104
873	13488	26004	4.05	4.0E-62	AW161479.1	EST_HUMAN	ATP SYNTHASE COUPLING FACTOR 6, MITOCHONDRIAL PRECURSOR (HUMAN);
874	13488	26003	3.94	4.0E-62	AW161479.1	EST_HUMAN	au71d03.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2781701 5' similar to gb:M37104
874	13488	26004	3.94	4.0E-62	AW161479.1	EST_HUMAN	ATP SYNTHASE COUPLING FACTOR 6, MITOCHONDRIAL PRECURSOR (HUMAN);
874	13488	26003	3.94	4.0E-62	AW161479.1	EST_HUMAN	au71d03.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2781701 5' similar to gb:M37104
874	13488	26004	3.94	4.0E-62	AW161479.1	EST_HUMAN	ATP SYNTHASE COUPLING FACTOR 6, MITOCHONDRIAL PRECURSOR (HUMAN);
1511	14103		1.01	4.0E-62	AA311281.1	EST_HUMAN	EST182043 Jurkat T-cells V Homo sapiens cDNA 5' end
2498	15062	27636	1.7	4.0E-62	A1827900.1	EST_HUMAN	gf12b08.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2350359 3' similar to
2498	15062	27637	1.7	4.0E-62	A1827900.1	EST_HUMAN	gf12b08.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2350359 3' similar to
3446	16054		7.95	4.0E-62	4557887	NT	Homo sapiens keratin 18 (KRT18) mRNA
6081	18698	31445	1.79	4.0E-62	4506978	NT	Homo sapiens solute carrier family 13 (sodium-dependent dicarboxylate transporter), member 2 (SLC13A2) mRNA
8439	19041	31829	2.58	4.0E-62	11420654	NT	Homo sapiens ubiquitin specific protease 9, X chromosome (Drosophila fat facets related) (USP9X), mRNA
7223	19754	32609	1.86	4.0E-62	11421041	NT	Homo sapiens phosphoribosyl pyrophosphate synthetase 2 (PRPS2), mRNA
7830	20142	33021	2.5	4.0E-62	7657057	NT	Homo sapiens eukaryotic translation initiation factor 2B, subunit 2 (beta, 39kD) (EIF2B2), mRNA
7830	20142	33022	2.5	4.0E-62	7657057	NT	Homo sapiens eukaryotic translation initiation factor 2B, subunit 2 (beta, 39kD) (EIF2B2), mRNA
8112	20653	33562	0.95	4.0E-62	11429973	NT	Homo sapiens 26S proteasome-associated pad1 homolog (POH1), mRNA

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Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8780	21319	34243	5.44	4.0E-62	AB033089.1	NT	Homo sapiens mRNA for KIAA1263 protein, partial cds
10890	23411	38429	2.18	4.0E-62	Z78766.1	NT	H. sapiens flow-sorted chromosome 6 HindIII fragment, SC6pA16D3
10890	23411	38430	2.18	4.0E-62	Z78766.1	NT	H. sapiens flow-sorted chromosome 6 HindIII fragment, SC6pA16D3
11146	23854	36696	2.05	4.0E-62	AW023559.1	EST_HUMAN	d15g04.y1 Morton Fetal Cochlea Homo sapiens cDNA clone IMAGE:2487751 5'
12003	24912		1.89	4.0E-62	11418192	NT	Homo sapiens non-histone chromosome protein 2 (S. cerevisiae)-like 1 (NHP2L1), mRNA
12420	24606	30887	1.78	4.0E-62	11418322	NT	Homo sapiens cadherin EGF LAG seven-pass G-type receptor 1 (CERS1), mRNA
12475	24600	30884	15	4.0E-62	11417862	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
12475	24600	30885	15	4.0E-62	11417862	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
12528	24842	30898	2.66	4.0E-62	11430460	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
78	12755	25236	0.85	3.0E-62	4557784	NT	Homo sapiens neurofilament 2 (bilateral acoustic neuroma) (NF2), mRNA
3082	15697	28169	0.93	3.0E-62	AB040909.1	NT	Homo sapiens mRNA for KIAA1478 protein, partial cds
3082	15697	28170	0.93	3.0E-62	AB040909.1	NT	Homo sapiens mRNA for KIAA1478 protein, partial cds
3761	16362	28830	5.68	3.0E-62	X52858.1	NT	Human cyclophilin-related processed pseudogene
8477	21016	33932	3.96	3.0E-62	A1632733.1	EST_HUMAN	was3704.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2289803 3' similar to contains THR.12 THR repetitive element :
1274	13870	26390	2.31	2.0E-62	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
8709	21248	34170	4.31	2.0E-62	BF328911.1	EST_HUMAN	RC0-BN0284-300500-031-e05 BN0284 Homo sapiens cDNA
8709	21248	34171	4.31	2.0E-62	BF328911.1	EST_HUMAN	RC0-BN0284-300500-031-e05 BN0284 Homo sapiens cDNA
10078	22571		3.84	2.0E-62	AF224669.1	NT	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
11537	23985		19.58	2.0E-62	BF330878.1	EST_HUMAN	QV4-BT0257-081199-017-e03 BT0257 Homo sapiens cDNA
1082	13687	28199	1.74	1.0E-62	AF248540.1	NT	Homo sapiens Intersectin 2 (SH3D18) mRNA, complete cds
1592	14185	26717	9.15	1.0E-62	L78810.1	NT	Homo sapiens ADP/ATP carrier protein (ANT-2) gene, complete cds
1834	14422	26972	1.05	1.0E-62	AA625207.1	EST_HUMAN	a70811.r1 Soares_NHMPu_S1 Homo sapiens cDNA clone IMAGE:1047404 5' similar to WP:K01H12.1 CE03453 :
2639	15555	28031	1.22	1.0E-62	AL039044.1	EST_HUMAN	DKFZ568F104_r1 568 (synonym: hfkid2) Homo sapiens cDNA clone DKFZp568F104 5'
4825	17208	29658	1.46	1.0E-62	8923201	NT	Homo sapiens hypothetical protein FLJ20212 (FLJ20212), mRNA
5305	17887	30280	0.74	1.0E-62	AA148822.1	EST_HUMAN	z08b08.r1 Soares_pregnant_uterus_NHPU Homo sapiens cDNA clone IMAGE:491511 5' similar to SW:CS61_BOVIN P10897 CYTOCHROME B561 :
7198	19720	32587	1.01	1.0E-62	AA490080.1	EST_HUMAN	ab05c02.s1 Strategene fetal retina 937202 Homo sapiens cDNA clone IMAGE:838906 3'
7199	19730	32581	3	1.0E-62	AA722878.1	EST_HUMAN	z989f10.s1 Soares_fetal_heart_NbHH19W Homo sapiens cDNA clone IMAGE:408771 3'
7199	19730	32582	3	1.0E-62	AA722878.1	EST_HUMAN	z989f10.s1 Soares_fetal_heart_NbHH19W Homo sapiens cDNA clone IMAGE:408771 3'
8892	21231	34151	0.71	1.0E-62	AA280050.1	EST_HUMAN	z93e07.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:706060 5'
8988	21528	34455	1.84	1.0E-62	7662289	NT	Homo sapiens KIAA0763 gene product (KIAA0763), mRNA

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8988	21529	34456	1.64	1.0E-62	7602289	NT	Homo sapiens KIAA0763 gene product (KIAA0763), mRNA
9030	21567	34495	2.39	1.0E-62	X15533.1	NT	H. sapiens lysosomal acid phosphatase gene (EC 3.1.3.2) Exon 9
9030	21567	34496	2.39	1.0E-62	X15533.1	NT	H. sapiens lysosomal acid phosphatase gene (EC 3.1.3.2) Exon 9
9476	21875	34822	2.95	1.0E-62	AA465170.1	EST_HUMAN	aa33d08.s1 NCI_CGAP_GCBT Homo sapiens cDNA clone IMAGE:815055 3'
11245	23775	36832	2.49	1.0E-62	Z78698.1	NT	H. sapiens flow-sorted chromosome 8 HindIII fragment, SC8pA14D8
12289	24490		6.66	1.0E-62	11418322	NT	Homo sapiens cadherin EGF LAG seven-pass G-type receptor 1 (CELSR1), mRNA
12508	24630	30894	2.04	1.0E-62	11430460	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
360	13009	25492	1.88	9.0E-63	AW816405.1	EST_HUMAN	QV4-ST0234-181199-037-05 ST0234 Homo sapiens cDNA
2383	14952		2.15	9.0E-63	C18159.1	EST_HUMAN	C18159 Human placenta cDNA (TFujihara) Homo sapiens cDNA clone GEN-559C10 5'
4114	16708	29162	9.09	9.0E-63	AB002348.2	NT	Homo sapiens mRNA for KIAA0350 protein, partial cds
4114	16708	29163	9.09	9.0E-63	AB002348.2	NT	Homo sapiens mRNA for KIAA0350 protein, partial cds
5453	18022	37142	3.93	9.0E-63	11418185	NT	Homo sapiens aconitase 2, mitochondrial (ACO2), mRNA
5657	18264	30782	1.55	9.0E-63	Y15056.1	NT	Homo sapiens mRNA for PAB kinase
7234	19764	32620	3.66	9.0E-63	11426985	NT	Homo sapiens nucleoporin 89kD (NUP89), mRNA
8268	20809	33729	1.12	9.0E-63	11421160	NT	Homo sapiens Ras association (RalGDS/AF-6) domain family 2 (RASSF2), mRNA
2382	14951	27524	1.5	8.0E-63	4557734	NT	Homo sapiens monoamine oxidase A (MAOA), nuclear gene encoding mitochondrial protein, mRNA
2412	14980	27555	2.47	8.0E-63	5031810	NT	Homo sapiens IL2-inducible T-cell kinase (ITK), mRNA
3508	16113	28590	4.62	8.0E-63	AF196349.1	NT	Gallus gallus Dach2 protein (Dach2) mRNA, complete cds
3508	16113	28591	4.62	8.0E-63	AF196349.1	NT	Gallus gallus Dach2 protein (Dach2) mRNA, complete cds
4352	16939	29381	3.64	8.0E-63	AL163268.2	NT	Homo sapiens chromosome 21 segment HS21C068
964	13575		2.31	7.0E-63	AB172137.1	EST_HUMAN	wm55g11.x1 NCI_CGAP_U12 Homo sapiens cDNA clone IMAGE:2439908 3'
5542	18174		34.88	6.0E-63	AA420803.1	EST_HUMAN	nc63f02.r1 NCI_CGAP_P11 Homo sapiens cDNA clone IMAGE:745947 similar to gb:Y00361 60S RIBOSOMAL PROTEIN (HUMAN);
8807	21346	34270	0.5	5.0E-63	11528464	NT	Homo sapiens G protein-coupled receptor 51 (GPR51), mRNA
3363	15971	28449	0.81	4.0E-63	AL163278.2	NT	Homo sapiens chromosome 21 segment HS21C078
3881	16479	28940	0.98	4.0E-63	AB014607.1	NT	Homo sapiens mRNA for KIAA0707 protein, partial cds
3881	16479	28941	0.98	4.0E-63	AB014607.1	NT	Homo sapiens mRNA for KIAA0707 protein, partial cds
6573	18171	31968	5.46	4.0E-63	AW750372.1	EST_HUMAN	CM3-BT0595-190100-072-e09 BT0595 Homo sapiens cDNA
6573	19171	31969	5.46	4.0E-63	AW750372.1	EST_HUMAN	CM3-BT0595-190100-072-e09 BT0595 Homo sapiens cDNA
11012	23526	36561	2.3	4.0E-63	AW134709.1	EST_HUMAN	UI-H-B1-abq-e-02-0-U1.s1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2712482 3'
11012	23526	36562	2.3	4.0E-63	AW134709.1	EST_HUMAN	UI-H-B1-abq-e-02-0-U1.s1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2712482 3'
1979	14562	27121	1.75	3.0E-63	AB018280.1	NT	Homo sapiens mRNA for KIAA0717 protein, partial cds
2807	15359	27926	1.56	3.0E-63	J00310.1	NT	Human Met-tRNA ¹ gene 1

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2848	13877	26399	11.17	3.0E-63	6005963	NT	Homo sapiens zinc finger protein 144 (Maf-18) (ZNF144), mRNA
6800	19197	32002	28.68	3.0E-63	11545810	NT	Homo sapiens hepatocellular carcinoma antigen gene 520 (LOC63928), mRNA
9822	22122	35086	0.77	3.0E-63	BE876158.1	EST_HUMAN	601485656F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3888253 5'
9822	22122	35087	0.77	3.0E-63	BE876158.1	EST_HUMAN	601485656F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3888253 5'
205	12866	25351	3.47	2.0E-63	U07804.1	NT	Human DNA topoisomerase I mRNA, partial cds
212	12873	25359	1.4	2.0E-63	4885226	NT	Homo sapiens eyes absent (Drosophila) homolog 2 (EYA2), mRNA
523	13155		5.21	2.0E-63	4557824	NT	Homo sapiens glutamate-cysteine ligase (gamma-glutamylcysteine synthetase), catalytic (72.8kD) (GLCLC) mRNA
859	13475	25988	6.8	2.0E-63	7657042	NT	Homo sapiens Down syndrome candidate region 1 (DSR1), mRNA
1612	14205	26739	3.37	2.0E-63	AB030388.1	NT	Homo sapiens RHCE mRNA for Rh blood CE group antigen polypeptide, complete cds
1612	14205	26740	3.37	2.0E-63	AB030388.1	NT	Homo sapiens RHCE mRNA for Rh blood CE group antigen polypeptide, complete cds
1803	14393	26938	1.06	2.0E-63	BE410739.1	EST_HUMAN	601301627F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3636103 5'
2128	14706	27277	1.33	2.0E-63	A1893961.1	EST_HUMAN	wf54602.x1 NCI CGAP_Lu19 Homo sapiens cDNA clone IMAGE:2408803 3' similar to gb:M57609 GLI3 PROTEIN (HUMAN);
3192	15804	28277	1	2.0E-63	4502166	NT	Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA
3324	15934	28411	1.7	2.0E-63	AF109718.1	NT	Homo sapiens chromosome 3 subtelomeric region
3976	16574	29044	2.08	2.0E-63	L39891.1	NT	Homo sapiens polycystic kidney disease-associated protein (PKD1) gene, complete cds
4990	17564	30009	1.18	2.0E-63	AF111167.2	NT	Homo sapiens jun dimerization protein gene, partial cds; cfos gene, complete cds; and unknown gene
5487	24742	30420	1.95	2.0E-63	11419429	NT	Homo sapiens similar to eotrichonucleotide pyrophosphatase/phosphodiesterase 3 (H. sapiens) (LOC63214), mRNA
6045	18684	31404	2.51	2.0E-63	BF373541.1	EST_HUMAN	QV1-FT0170-040700-265-c05 FT0170 Homo sapiens cDNA
6045	18684	31405	2.51	2.0E-63	BF373541.1	EST_HUMAN	QV1-FT0170-040700-265-c05 FT0170 Homo sapiens cDNA
6333	18939	31715	1.04	2.0E-63	11421940	NT	Homo sapiens protein kinase, cAMP-dependent, regulatory, type II, beta (PRKAR2B), mRNA
6333	18939	31716	1.04	2.0E-63	11421940	NT	Homo sapiens protein kinase, cAMP-dependent, regulatory, type II, beta (PRKAR2B), mRNA
							Human gemline T-cell receptor beta chain Dopamine-beta-hydroxylase-like, TRY1, TRY2, TRY3, TCRBV27S1P, TCRBV22S1A2N1T, TCRBV8S1A1T, TCRBV7S1A1N2T, TCRBV5S1A1T, TCRBV13S3, TCRBV6S7P, TCRBV7S3A2T, TCRBV13S2A1T, TCRBV9S2A2PT, TCRBV7S2A1N4T, TCRBV13S9/13S>
6803	19394	32210	1.62	2.0E-63	U66059.1	NT	Homo sapiens MIST mRNA, partial cds
6844	19434	32249	0.87	2.0E-63	AB032369.1	NT	Homo sapiens MIST mRNA, partial cds
6844	19434	32250	0.87	2.0E-63	AB032369.1	NT	Homo sapiens MIST mRNA, partial cds
7135	19474	32285	1.43	2.0E-63	9910366	NT	Homo sapiens Carbonic anhydrase-related protein 10 (LOC58934), mRNA
7135	19474	32296	1.43	2.0E-63	9910366	NT	Homo sapiens Carbonic anhydrase-related protein 10 (LOC58934), mRNA

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7755	20263	33158	0.89	2.0E-63	AB046844.1	NT	Homo sapiens mRNA for KIAA1824 protein, partial cds
8470	21010	33927	2.91	2.0E-63	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
8884	21522	34449	1.12	2.0E-63	11420849	NT	Homo sapiens kinesin family member 3B (KIF3B), mRNA
8984	21522	34450	1.12	2.0E-63	11420849	NT	Homo sapiens kinesin family member 3B (KIF3B), mRNA
9852	22350	35331	0.9	2.0E-63	AL163218.2	NT	Homo sapiens chromosome 21 segment HS21C018
10625	23157	36170	22.7	2.0E-63	N78945.1	EST_HUMAN	zb18b05.s1 Soares, fetal_lung_NHL19W Homo sapiens cDNA clone IMAGE:302385 3' similar to gb:X17206.40S RIBOSOMAL PROTEIN S4 (HUMAN);
10652	23184	36198	2.83	2.0E-63	AF099810.1	NT	Homo sapiens neuraxin III-alpha gene, partial cds
10652	23184	36199	2.83	2.0E-63	AF099810.1	NT	Homo sapiens neuraxin III-alpha gene, partial cds
11888	24851	30702	6.92	2.0E-63	11418185	NT	Homo sapiens aconitase 2, mitochondrial (ACO2), mRNA
12823	24701	30864	1.4	2.0E-63	AB011399.1	NT	Homo sapiens gene for AF-8, complete cds
4434	17020	29460	3.52	1.0E-63	F08485.1	EST_HUMAN	HSC2VD111 normalized infant brain cDNA Homo sapiens cDNA clone c-zvd11
4434	17020	29461	3.52	1.0E-63	F08485.1	EST_HUMAN	HSC2VD111 normalized infant brain cDNA Homo sapiens cDNA clone c-zvd11
5555	18187	30802	1.32	1.0E-63	AJ271736.1	NT	Homo sapiens Xq pseudautosomal region, segment 2/2
5943	18563	31293	1.38	1.0E-63	AW582288.1	EST_HUMAN	QVO-ST0215-060100-083-b09 ST0215 Homo sapiens cDNA
8408	20948		2.21	1.0E-63	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047
12581	24970		17.03	1.0E-63	AL163207.2	NT	Homo sapiens chromosome 21 segment HS21C007
6122	18737	31489	1.06	9.0E-64	AW401433.1	EST_HUMAN	UI-HF-BK0-aad-b-09-0-UI.r1 NIH_MGC_36 Homo sapiens cDNA clone IMAGE:3053153 5'
7808	20351	33259	4.35	9.0E-64	AI478186.1	EST_HUMAN	Im50507.x1 NCL CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2161525 3'
1084	13689		13.09	8.0E-64	BE280796.1	EST_HUMAN	601155232F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3139038 5'
6289	18897	31668	3.17	8.0E-64	BE885755.1	EST_HUMAN	601508968F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3910338 5'
11594	24109		1.48	8.0E-64	11418177	NT	Homo sapiens Ran GTPase activating protein 1 (RANGAP1), mRNA
11752	24148		3.56	8.0E-64	T60651.1	EST_HUMAN	y688b02.r1 Stratagene lung (#637210) Homo sapiens cDNA clone IMAGE:79179 5'
3582	18186		0.84	7.0E-64	BE394321.1	EST_HUMAN	601311455F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3633204 5'
4838	17416	28868	2.85	7.0E-64	4507490	NT	Homo sapiens thimet oligopeptidase 1 (THOP1) mRNA
4838	17416	28869	2.85	7.0E-64	4507490	NT	Homo sapiens thimet oligopeptidase 1 (THOP1) mRNA
7768	20274	33172	0.88	7.0E-64	4508786	NT	Homo sapiens IQ motif containing GTPase activating protein 1 (IQGAP1) mRNA
8946	22441	35418	4.54	7.0E-64	Y07848.1	NT	Homo sapiens EWS, ga22, rtp22 and bam22 genes
1760	14350	26894	2.4	6.0E-64	A1851992.1	EST_HUMAN	wb51e07.x1 NCL CGAP_G06 Homo sapiens cDNA clone IMAGE:2309220 3' similar to gb:M15182 BETA-GLUCURONIDASE PRECURSOR (HUMAN);
1760	14350	26895	2.4	6.0E-64	A1851992.1	EST_HUMAN	wb51e07.x1 NCL CGAP_G06 Homo sapiens cDNA clone IMAGE:2309220 3' similar to gb:M15182 BETA-GLUCURONIDASE PRECURSOR (HUMAN);
3156	15770	28236	4.46	6.0E-64	AW026445.1	EST_HUMAN	ww13e03.x1 NCL CGAP_Brn23 Homo sapiens cDNA clone IMAGE:2529436 3'
3156	15770	28237	4.46	6.0E-64	AW026445.1	EST_HUMAN	ww13e03.x1 NCL CGAP_Brn23 Homo sapiens cDNA clone IMAGE:2529436 3'

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5805	18430	31149	3.71	6.0E-64	Y18933.1	NT	Homo sapiens MCP-1 gene and enhancer region
5805	18430	31150	3.71	6.0E-64	Y18933.1	NT	Homo sapiens MCP-1 gene and enhancer region
5823	18447	31189	5.8	6.0E-64	M13975.1	NT	Homo sapiens protein kinase C beta-II type (PRKCB1) mRNA, complete cds
7286	19814	32670	2.45	6.0E-64	11525879	NT	Homo sapiens mesenchyme homeo box 1 (MEOX1), mRNA
7286	19814	32671	2.45	6.0E-64	11525879	NT	Homo sapiens mesenchyme homeo box 1 (MEOX1), mRNA
9250	21776	34727	8.24	6.0E-64	11420555	NT	Homo sapiens acyl-CoA synthetase (LOC55802), mRNA
9425	21834	34883	2	6.0E-64	AF274753.1	NT	Homo sapiens progressive ankylosis-like protein (ANK) mRNA, complete cds
9634	22134	35098	2.23	6.0E-64	S76475.1	NT	tkc [human, brain, mRNA, 2715 nt]
10949	23181	38194	7.87	6.0E-64	11420197	NT	Homo sapiens stromal antigen 3 (STAG3), mRNA
10949	23181	38195	7.87	6.0E-64	11420197	NT	Homo sapiens stromal antigen 3 (STAG3), mRNA
10986	15770	28236	1.84	6.0E-64	AW028445.1	EST_HUMAN	ww13e03.x1 NCI_CGAP_Bm23 Homo sapiens cDNA clone IMAGE:2529436 3'
10986	15770	28237	1.84	6.0E-64	AW028445.1	EST_HUMAN	ww13e03.x1 NCI_CGAP_Bm23 Homo sapiens cDNA clone IMAGE:2529436 3'
11903	24242	31008	2.45	6.0E-64	11526188	NT	Homo sapiens interleukin 10 receptor, beta (IL10RB), mRNA
853	13489	25979	3.09	5.0E-64	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
853	13489	25980	3.09	5.0E-64	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
1383	13977	26504	0.95	5.0E-64	AB020710.1	NT	Homo sapiens mRNA for KIAA0803 protein, partial cds
1467	14059	26593	2.55	5.0E-64	L40933.1	NT	Homo sapiens phosphoglucomutase-related protein (PGMRP) gene, complete cds
1467	14059	26594	2.55	5.0E-64	L40933.1	NT	Homo sapiens phosphoglucomutase-related protein (PGMRP) gene, complete cds
1749	14339	26886	1.52	5.0E-64	U89358.1	NT	Human [(3) mb] protein homolog mRNA, complete cds
2853	14120	28657	3.5	5.0E-64	7862205	NT	Homo sapiens KIAA0818 gene product (KIAA0818), mRNA
2853	14120	28658	3.5	5.0E-64	7862205	NT	Homo sapiens KIAA0818 gene product (KIAA0818), mRNA
4032	18630	28098	7.78	5.0E-64	AF017433.1	NT	Homo sapiens putative transcription factor CR53 (CR53) mRNA, partial cds
4181	18771	29220	0.88	5.0E-64	AB020710.1	NT	Homo sapiens mRNA for KIAA0803 protein, partial cds
10692	23222	36235	3.91	4.0E-64	AW813783.1	EST_HUMAN	RC3-ST0197-120200-015-a03 ST0197 Homo sapiens cDNA
10692	23222	36236	3.91	4.0E-64	AW813783.1	EST_HUMAN	RC3-ST0197-120200-015-a03 ST0197 Homo sapiens cDNA
2239	14814	27386	3.14	3.0E-64	C18895.1	EST_HUMAN	C18895 Human placenta cDNA (T Fujiiwara) Homo sapiens cDNA clone GEN-569E02 5'
3293	15804	28384	0.76	3.0E-64	BE794381.1	EST_HUMAN	601589565F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3943577 5'
3481	16096	28570	2.57	3.0E-64	AV711714.1	EST_HUMAN	AV711714 DCA Homo sapiens cDNA clone DCAAMC01 5'
3491	18096	28571	2.57	3.0E-64	AV711714.1	EST_HUMAN	AV711714 DCA Homo sapiens cDNA clone DCAAMC01 5'
8232	18841	31613	1.53	3.0E-64	Z26273.1	NT	H. sapiens isoform 1 gene for L-type calcium channel, exon 28
8618	19216	32021	3.11	3.0E-64	BF370000.1	EST_HUMAN	RC8-FN0018-290600-011-G11 FN0018 Homo sapiens cDNA
8402	20942	33864	1.83	3.0E-64	AF248953.1	NT	Homo sapiens golgi matrix protein GM130 (GOLGA2) mRNA, complete cds
8402	20942	33865	1.83	3.0E-64	AF248953.1	NT	Homo sapiens golgi matrix protein GM130 (GOLGA2) mRNA, complete cds

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8432	20972	33885	4.49	3.0E-64	BE206521.1	EST_HUMAN	bb72h12.y1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3047975 5' similar to gb:L08069 DNAJ PROTEIN HOMOLOG 2 (HUMAN);
8432	20972	33886	4.49	3.0E-64	BE206521.1	EST_HUMAN	bb72h12.y1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3047975 5' similar to gb:L08069 DNAJ PROTEIN HOMOLOG 2 (HUMAN);
9348	21862	34810	1.23	3.0E-64	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
9348	21862	34811	1.23	3.0E-64	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
9433	21959	34907	0.72	3.0E-64	AW977384.1	EST_HUMAN	EST389493 IMAGE ressequences, MAGO Homo sapiens cDNA
9433	21959	34908	0.72	3.0E-64	AW977384.1	EST_HUMAN	EST389493 IMAGE ressequences, MAGO Homo sapiens cDNA
11118	23627	36669	1.83	3.0E-64	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
11118	23627	36670	1.83	3.0E-64	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
11539	23687	37058	4.89	3.0E-64	AL163227.2	NT	Homo sapiens chromosome 21 segment HS21C027
1127	13730	26241	1.26	2.0E-64	AA606940.1	EST_HUMAN	af09408.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1031151 3'
1441	14034	26562	8.3	2.0E-64	4757701	NT	Homo sapiens eIF4E-like cap-binding protein (4EHP) mRNA
2566	15130		1.88	2.0E-64	A1927030.1	EST_HUMAN	wc87b01.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2462281 3' similar to contains element L1 repetitive element;
2570	15133	27702	1.25	2.0E-64	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
2570	15133	27703	1.25	2.0E-64	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
3174	15787	28259	1.17	2.0E-64	4504068	NT	Homo sapiens glutamic-oxaloacetic transaminase 2, mitochondrial (aspartate aminotransferase 2) (GOT2), nuclear gene encoding mitochondrial protein, mRNA
3855	16453	28916	0.63	2.0E-64	AW958145.1	EST_HUMAN	EST370215 IMAGE ressequences, MAGO Homo sapiens cDNA
3855	16453	28917	0.63	2.0E-64	AW958145.1	EST_HUMAN	EST370215 IMAGE ressequences, MAGO Homo sapiens cDNA
6157	18770	31534	2.28	2.0E-64	AU124387.1	EST_HUMAN	AU124387 NT2RM2 Homo sapiens cDNA clone NT2RM2002113 5'
6389	18982	31772	1.52	2.0E-64	AF113708.1	NT	Homo sapiens angiotensin 4 (ANG4) mRNA, partial cds
6611	19208	32018	4.45	2.0E-64	BF668537.1	EST_HUMAN	602123474F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4280395 5'
6708	19301	32105	1.38	2.0E-64	AI078387.1	EST_HUMAN	oz29b03.x1 Soares_total Testis_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:1676717 3'
6802	19393	32209	53.03	2.0E-64	M77185.1	NT	H. sapiens dopamine receptor D5 pseudogene 1, partial cds
8603	21142	34055	1.98	2.0E-64	11434008	NT	Homo sapiens lymphocyte cytosolic protein 1 (L-plasin) (LCP1), mRNA
8603	21142	34056	1.98	2.0E-64	11434008	NT	Homo sapiens lymphocyte cytosolic protein 1 (L-plasin) (LCP1), mRNA
9157	21692	34636	1.14	2.0E-64	AU132570.1	EST_HUMAN	AU132570 NT2RP4 Homo sapiens cDNA clone NT2RP4000109 5'
9889	22388	35364	0.48	2.0E-64	T06397.1	EST_HUMAN	EST04288 Fetal brain, Stralagene (cat#836208) Homo sapiens cDNA clone HFBDS88
9889	22386	35365	0.48	2.0E-64	T06397.1	EST_HUMAN	EST04286 Fetal brain, Stralagene (cat#836208) Homo sapiens cDNA clone HFBDS88
10643	23175	36187	2.38	2.0E-64	BF528114.1	EST_HUMAN	602042892F1 NCI_CGAP_Brn67 Homo sapiens cDNA clone IMAGE:4180556 5'
10929	23447	36488	5.36	2.0E-64	A1922911.1	EST_HUMAN	wn81b06.x1 NCI_CGAP_U11 Homo sapiens cDNA clone IMAGE:2452211 3'
10929	23447	36489	5.36	2.0E-64	A1922911.1	EST_HUMAN	wn81b06.x1 NCI_CGAP_U11 Homo sapiens cDNA clone IMAGE:2452211 3'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11112	23622	36683	1.78	2.0E-64	AW864773.1	EST_HUMAN	PM2-SN0018-220300-002-e12 SN0018 Homo sapiens cDNA
11826	24194	31034	1.5	2.0E-64	8567387	NT	Homo sapiens period (Drosophila) homolog 3 (PER3), mRNA
12285	24487		2.44	2.0E-64	H55162.1	EST_HUMAN	CHR220101 Chromosome 22 exon Homo sapiens cDNA clone C22_132 5'
279	12836	25421	1.64	1.0E-64	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
1815	14405	26949	9.93	1.0E-64	AI829419.1	EST_HUMAN	au60c01.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2519136 3' similar to gb:121696_cds1 PROTHYMOSIN ALPHA (HUMAN); contains element MSR1 repetitive element ;
3045	15661	28142	0.82	1.0E-64	4507334	NT	Homo sapiens synaptotagmin 1 (SYNJ1), mRNA
3581	16185	28648	5.94	1.0E-64	AF196779.1	NT	Homo sapiens transcription factor IG-HM enhancer 3, JM11 protein, JM4 protein, JM5 protein, T54 protein, JM10 protein, A4 differentiation-dependent protein, triple LIM domain protein 6, and synaptophysin genes, complete cds; and L-type calcium channel a2
3844	16247	28722	1.14	1.0E-64	AF228527.1	NT	Homo sapiens TRIAD3 mRNA, partial cds
3844	16247	28723	1.14	1.0E-64	AF228527.1	NT	Homo sapiens TRIAD3 mRNA, partial cds
3968	16598	29035	0.87	1.0E-64	8922829	NT	Homo sapiens hypothetical protein FLJ11028 (FLJ11028), mRNA
9976	22471	35454	0.84	1.0E-64	AA042975.1	EST_HUMAN	zh53f08.s1 Soares_pregnant uterus_NbHPU Homo sapiens cDNA clone IMAGE:486567 3'
11798	24178		1.37	1.0E-64	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C048
2315	14887	27462	1.02	9.0E-65	X89211.1	NT	H sapiens DNA for endogenous retroviral like element
2315	14887	27463	1.02	9.0E-65	X89211.1	NT	H sapiens DNA for endogenous retroviral like element
11410	23861		35.61	9.0E-65	BF330676.1	EST_HUMAN	QV4.B10257-081199-017-e03 BT0257 Homo sapiens cDNA
11383	23835	36897	14.63	8.0E-65	AI929244.1	EST_HUMAN	au58h07.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2519005 3' similar to SW:RL21_HUMAN P46778 60S RIBOSOMAL PROTEIN L21. ;
10059	22554	35550	2.06	7.0E-65	BE081653.1	EST_HUMAN	QV2-BT0635-240400-182-c02 BT0635 Homo sapiens cDNA
1094	13699	26209	1.88	6.0E-65	AV721898.1	EST_HUMAN	AV721898 HTB Homo sapiens cDNA clone HTBBZC06 5'
1966	14550		5.21	6.0E-65	AA550928.1	EST_HUMAN	nl86d10.s1 NCI_CGAP_Pr11 Homo sapiens cDNA clone IMAGE:999379 similar to gb:K03002 60S RIBOSOMAL PROTEIN L32 (HUMAN);
8681	21220	34140	2.24	6.0E-65	AW083252.1	EST_HUMAN	xc07b09.x1 NCI_CGAP_Cox21 Homo sapiens cDNA clone IMAGE:2583545 3' similar to TR:Q63306 Q63308 LONG INTERSPERSED REPETITIVE DNA CONTAINING 7 ORFS. ; contains L1.b2 L1 repetitive element. ;
8941	21479	34400	4.18	6.0E-65	AA427878.1	EST_HUMAN	zw53b06.s1 Soares_fetal_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:773747 3'
8941	21479	34401	4.18	6.0E-65	AA427878.1	EST_HUMAN	zw53b06.s1 Soares_fetal_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:773747 3'
9004	21541	34471	1.04	6.0E-65	AI085314.1	EST_HUMAN	qf18h05.x1 NCI_CGAP_Brn25 Homo sapiens cDNA clone IMAGE:1750425 3'
9004	21541	34472	1.04	6.0E-65	AI085314.1	EST_HUMAN	qf18h05.x1 NCI_CGAP_Brn25 Homo sapiens cDNA clone IMAGE:1750425 3'
10752	23276	36289	12.35	6.0E-65	BE567816.1	EST_HUMAN	601340485F1NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3682677 5'
11135	23843	36683	1.73	6.0E-65	AW209752.1	EST_HUMAN	UI-H-B11-afq-d-10-0-J1.s1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:272626 3'
11369	23821	36883	4.4	6.0E-65	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
659	13282	25762	0.75	5.0E-65	AF084604.1	NT	Homo sapiens KE03 protein mRNA, partial cds
1397	13991	26518	1.8	5.0E-65	7681951	NT	Homo sapiens KIAA0156 gene product (KIAA0156), mRNA
1397	13991	26519	1.8	5.0E-65	7681951	NT	Homo sapiens KIAA0156 gene product (KIAA0156), mRNA
2200	14776	27349	0.87	5.0E-65	AB033768.1	NT	Homo sapiens hPAD-colony10 mRNA for peptidylarginine deiminase type I, complete cds
3294	15905	28385	2.39	5.0E-65	4507848	NT	Homo sapiens ubiquitin specific protease 13 (isopeptidase T-3) (USP13) mRNA
3294	15905	28386	2.39	5.0E-65	4507848	NT	Homo sapiens ubiquitin specific protease 13 (isopeptidase T-3) (USP13) mRNA
10364	22858	35850	0.99	5.0E-65	AF009688.1	NT	Multiple sclerosis associated retrovirus polyprotein (pol) mRNA, partial cds
207	12888	26354	2.15	4.0E-65	AL120419.1	EST_HUMAN	DKFZp761G108.1 761 (synonym: hamy2) Homo sapiens cDNA clone DKFZp761G108.5
775	13394	25894	1.3	4.0E-65	AI266468.1	EST_HUMAN	qm46e01.x1 Soares_placenta_8to8weeks_2NblHP8to9W Homo sapiens cDNA clone IMAGE:1891800 3'
775	13394	25895	1.3	4.0E-65	AI266468.1	EST_HUMAN	qm46e01.x1 Soares_placenta_8to8weeks_2NblHP8to9W Homo sapiens cDNA clone IMAGE:1891800 3'
1117	13720	26232	1.52	4.0E-65	4826735	NT	Homo sapiens fragile X mental retardation, autosomal homolog 1 (FXR1), mRNA
1533	14125	26662	17.23	4.0E-65	4506636	NT	Homo sapiens ribosomal protein L34 (RPL34) mRNA
2374	14944	27516	1.14	4.0E-65	BE221469.1	EST_HUMAN	hu25e04.x1 NCI_CGAP_Mel15 Homo sapiens cDNA clone IMAGE:3171102 3'
2374	14944	27517	1.14	4.0E-65	BE221469.1	EST_HUMAN	hu25e04.x1 NCI_CGAP_Mel15 Homo sapiens cDNA clone IMAGE:3171102 3'
6303	18910	31682	4.44	4.0E-65	AB033093.1	NT	Homo sapiens mRNA for KIAA1287 protein, partial cds
6303	18910	31683	4.44	4.0E-65	AB033093.1	NT	Homo sapiens mRNA for KIAA1287 protein, partial cds
7171	19703	32550	0.85	4.0E-65	M19879.1	NT	Human clebrin 27 gene, exons 10 and 11, and L1 and Alu repeats
7271	19798	32656	2.39	4.0E-65	11545780	NT	Homo sapiens hypothetical protein FLJ22087 (FLJ22087), mRNA
7783	20326	33230	0.81	4.0E-65	5453765	NT	Homo sapiens nel (chicken)-like 2 (NELL2), mRNA
7783	20326	33231	0.81	4.0E-65	5453765	NT	Homo sapiens nel (chicken)-like 2 (NELL2), mRNA
9072	21609	34539	0.8	4.0E-65	11429127	NT	Homo sapiens Janus kinase 2 (a protein tyrosine kinase) (JAK2), mRNA
10473	22967		2.55	4.0E-65	AJ277546.2	NT	Homo sapiens WEE1 gene for protein kinase and partial ZNF143 gene for zinc finger transcription factor
10833	23354	36369	1.93	4.0E-65	AV738764.1	EST_HUMAN	AV738764 CB Homo sapiens cDNA clone CBCCBE05 5'
10877	23492	36522	3.39	4.0E-65	AF119846.1	NT	Homo sapiens PRO1474 mRNA, complete cds
12124	13720	26232	1.41	4.0E-65	4826735	NT	Homo sapiens fragile X mental retardation, autosomal homolog 1 (FXR1), mRNA
101	12778	25261	2.51	3.0E-65	5031976	NT	Homo sapiens pre-B-cell colony-enhancing factor (PBEF) mRNA
102	12778	25261	2.35	3.0E-65	5031976	NT	Homo sapiens pre-B-cell colony-enhancing factor (PBEF) mRNA
1275	15393		11.57	3.0E-65	X78932.1	NT	H sapiens HZF9 mRNA for zinc finger protein
1505	14197	26729	0.98	3.0E-65	4504626	NT	Homo sapiens immunoglobulin superfamily, member 3 (IGSF3) mRNA, and translated products
1861	14449	27007	1	3.0E-65	AI000592.1	EST_HUMAN	ov23f03.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1638173 3' similar to contains element MSR1 repetitive element ;

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3019	15635	28111	0.8	3.0E-65	D87078.2	NT	Homo sapiens mRNA for KIAA0235 protein, partial cds
3318	15925	28403	0.98	3.0E-65	4504950	NT	Homo sapiens laminin, beta 1 (LAMB1), mRNA
3784	16384	28849	1.18	3.0E-65	A1000682.1	EST_HUMAN	ov23f03.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1638173 3' similar to contains element MSR1 repetitive element:
4754	17335	29779	1.38	3.0E-65	6912385	NT	Homo sapiens rab6 GTPase activating protein (GAP and centrosome-associated) (GAPCENA), mRNA
9881	22476	35458	1.44	3.0E-65	BE787366.1	EST_HUMAN	601479886F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3882405 5'
11267	23005	36013	13.23	3.0E-65	AA430006.1	EST_HUMAN	zw65a06.r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:781042 5'
3451	16058	28534	5.71	2.0E-65	BF680294.1	EST_HUMAN	602155082F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4295868 5'
6857	19253		5.63	2.0E-65	BE263373.1	EST_HUMAN	601180883F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3534741 5'
7186	19718	32565	25.57	2.0E-65	BF578922.1	EST_HUMAN	602134359F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4289285 5'
8778	21318	34241	1.21	2.0E-65	AK024463.1	NT	Homo sapiens mRNA for FLJ00056 protein, partial cds
8778	21318	34242	1.21	2.0E-65	AK024463.1	NT	Homo sapiens mRNA for FLJ00056 protein, partial cds
11750	24147		6.58	2.0E-65	AA307804.1	EST_HUMAN	EST178755 Colon carcinoma (HCC) cell line Homo sapiens cDNA 5' end similar to similar to endogenous retrovirus
12241	24832		2.26	2.0E-65	BF246086.1	EST_HUMAN	601854033F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:4073769 5'
94	12770		0.78	1.0E-65	BF125544.1	EST_HUMAN	601763488F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:4026501 5'
564	13195	25674	1.4	1.0E-65	7657495	NT	Homo sapiens putative Rab5 GDP/GTP exchange factor homologue (RABEX5), mRNA
2084	14665	27236	0.95	1.0E-65	AB040846.1	NT	Homo sapiens mRNA for KIAA1513 protein, partial cds
3418	16027	28508	0.94	1.0E-65	BE466881.1	EST_HUMAN	hz24a09.x1 NCI_CGAP_GC8 Homo sapiens cDNA clone IMAGE:3208888 3'
4070	16668	29127	1.85	1.0E-65	4504082	NT	Homo sapiens glypican 4 (GPC4) mRNA
4070	16668	29128	1.85	1.0E-65	4504082	NT	Homo sapiens glypican 4 (GPC4) mRNA
4285	16871	29317	2.39	1.0E-65	AW029340.1	EST_HUMAN	wx09c08.x1 NCI_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2543152 3'
4285	16871	29318	2.39	1.0E-65	AW029340.1	EST_HUMAN	wx09c08.x1 NCI_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2543152 3'
5668	18285	30775	0.74	1.0E-65	A1243738.1	EST_HUMAN	qh88h07.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1854109 3' similar to TR:Q07823
8186	20737	33648	4.11	1.0E-65	AW820481.1	EST_HUMAN	Q07823 MAC30 PROTEIN
8186	20737	33649	4.11	1.0E-65	AW820481.1	EST_HUMAN	QV2-ST0298-140200-042-112 ST0298 Homo sapiens cDNA
8222	20763	33679	0.56	1.0E-65	BE732118.1	EST_HUMAN	QV2-ST0298-140200-042-112 ST0298 Homo sapiens cDNA
8222	20763	33680	0.56	1.0E-65	BE732118.1	EST_HUMAN	601566124F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3841012 5'
8261	20802	33719	2.05	1.0E-65	AU141295.1	EST_HUMAN	601566124F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3841012 5'
8261	20802	33720	2.05	1.0E-65	AU141295.1	EST_HUMAN	AU141295 THYRO1 Homo sapiens cDNA clone THYRO1000358 5'
8774	21313	34235	2.42	1.0E-65	BF698707.1	EST_HUMAN	AU141295 THYRO1 Homo sapiens cDNA clone THYRO1000358 5'
8950	21488	34410	2.86	1.0E-65	AU129040.1	EST_HUMAN	602126239F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4283313 5'
							AU129040 NT2RP2 Homo sapiens cDNA clone NT2RP2004714 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8950	21488	34411	2.86	1.0E-65	AU129040.1	EST_HUMAN	AU129040 NT2RP2 Homo sapiens cDNA clone NT2RP2004714 5'
8951	21499		2.54	1.0E-65	11431994	NT	Homo sapiens inositol 1,4,5-triphosphate receptor, type 1 (ITPR1), mRNA
9398	21821	34770	5.09	1.0E-65	AU191716.1	EST_HUMAN	qds6a02.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1733450 3' similar to gb:M29581 ZINC
9800	22298	35283	1.39	1.0E-65	AU153783.1	EST_HUMAN	FINGER PROTEIN 8 (HUMAN); contains MER19.11 MER19 repetitive element;
10203	22698	35692	0.65	1.0E-65	AA089559.1	EST_HUMAN	AU153783 NT2RP3 Homo sapiens cDNA clone NT2RP3004016 3'
10463	22957	35968	1.12	1.0E-65	AB037832.1	NT	Z775a04.1 Soares_pituitary_gland_N3HPG Homo sapiens cDNA clone IMAGE:382734 5'
10529	23066	36078	3.58	1.0E-65	M26167.1	NT	Homo sapiens mRNA for KIAA1411 protein, partial cds
10558	23188	36204	22.3	1.0E-65	4508660	NT	Human platelet factor 4 variation 1 (PF4var1) gene, complete cds
11010	23524	36558	2.79	1.0E-65	BF698707.1	EST_HUMAN	Homo sapiens ribosomal protein L7a (RPL7A) mRNA
11088	23600	36638	2.25	1.0E-65	AB21017.1	EST_HUMAN	602128239F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4283313 5'
11799	24179		2.28	1.0E-65	1141804.1	NT	ts76a06.x1 NCI_CGAP_GC8 Homo sapiens cDNA clone IMAGE:2237170 3' similar to gb:L15533_rna1
11898	24238	31005	5.17	1.0E-65	11418322	NT	PANCREATITIS ASSOCIATED PROTEIN 1 PRECURSOR (HUMAN);
75	12753	25232	4.57	9.0E-66	AL160311.1	NT	Homo sapiens cadherin EGF LAG seven-pass G-type receptor 1 (CELSR1), mRNA
75	12753	25233	4.57	9.0E-66	AL160311.1	NT	Novel human gene mapping to chromosome 22
1398	13992	26520	1.54	9.0E-66	5031980	NT	Novel human gene mapping to chromosome 22
1398	13992	26521	1.54	9.0E-66	5031980	NT	Homo sapiens 26S proteasome-associated pad1 homolog (POH1) mRNA
1531	14123		4.45	9.0E-66	M87299.1	NT	Human transposon-like element, partial
4802	17380	29830	0.57	9.0E-66	AL137163.1	NT	Novel human gene mapping to chromosome X
4801	17379	29829	0.66	8.0E-66	AA424304.1	EST_HUMAN	z990c05.r1 Soares_NIH-IMPu_S1 Homo sapiens cDNA clone IMAGE:767048 5'
11225	23756		1.78	7.0E-66	BE064410.1	EST_HUMAN	RC4-BT0311-141189-011-h06 BT0311 Homo sapiens cDNA
4455	17041	29483	1.11	6.0E-66	AB924653.1	EST_HUMAN	wn57h07.x1 NCI_CGAP_Lu19 Homo sapiens cDNA clone IMAGE:2449597 3' similar to WP:F15G9.4A
4455	17041	29484	1.11	6.0E-66	AB924653.1	EST_HUMAN	CE18595;
4455	17041	29485	1.11	6.0E-66	AB924653.1	EST_HUMAN	wn57h07.x1 NCI_CGAP_Lu19 Homo sapiens cDNA clone IMAGE:2449597 3' similar to WP:F15G9.4A
8373	20913		0.48	6.0E-66	BE175563.1	EST_HUMAN	CE18595;
11038	23552	36587	7.01	6.0E-66	X69181.1	NT	PM2-HT0604-030300-001-506 HT0604 Homo sapiens cDNA
1411	14004	26532	1.25	5.0E-66	BE064410.1	EST_HUMAN	Hi.sapiens mRNA for ribosomal protein L31
5278	17840	30266	0.57	5.0E-66	BE898644.1	EST_HUMAN	RC4-BT0311-141189-011-h06 BT0311 Homo sapiens cDNA
5278	17840	30267	0.57	5.0E-66	BE898644.1	EST_HUMAN	601681592F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3951791 5'
9218	21735	34677	14.1	5.0E-66	11420567	NT	601681592F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3951791 5'
							Homo sapiens thyroid hormone receptor binding protein (AIB3), mRNA

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Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
823	13440	25947	1.13	4.0E-66	6679816	NT	Mus musculus fragile X mental retardation syndrome 1 homolog (Fmr1), mRNA
1771	14361	26906	0.87	4.0E-66	AW897798.1	EST_HUMAN	RC1-NN0063-100500-022-022 NN0063 Homo sapiens cDNA
2319	14891	27466	1.64	4.0E-66	X89211.1	NT	H. sapiens DNA for endogenous retroviral like element
2513	15077		2.35	4.0E-66	AJ223364.1	NT	Homo sapiens germ-line DNA upstream of Jkappa locus
4898	17473		6.76	4.0E-66	9635487	NT	Human endogenous retrovirus, complete genome
5738	18365	31072	3.33	4.0E-66	11428643	NT	Homo sapiens methylene tetrahydrofolate dehydrogenase (NAD+ dependent), methylenetetrahydrofolate cyclodiolase (MTHFD2), mRNA
5918	18540	31266	0.8	4.0E-66	AW939119.1	EST_HUMAN	QV1-DT0068-110200-067-g10 DT0068 Homo sapiens cDNA
6940	18048	30470	4.62	4.0E-66	AW965473.1	EST_HUMAN	EST377546 IMAGE resequences, MAGI Homo sapiens cDNA
7185	19717	32564	7.41	4.0E-66	U78168.1	NT	Homo sapiens cAMP-regulated guanine nucleotide exchange factor 1 (cAMP-GEF1) mRNA, complete cds
7625	18365	31072	1.05	4.0E-66	11428643	NT	Homo sapiens methylene tetrahydrofolate dehydrogenase (NAD+ dependent), methylenetetrahydrofolate cyclodiolase (MTHFD2), mRNA
8022	20584	33466	6.44	4.0E-66	11421638	NT	Homo sapiens hypothetical protein FLJ20116 (FLJ20116), mRNA
8076	20618	33532	0.98	4.0E-66	X57147.1	NT	Human endogenous retrovirus PHE.1 (ERV9)
1473	14065	26601	11.5	3.0E-66	4502088	NT	Homo sapiens solute carrier family 25 (mitochondrial carrier; adenine nucleotide translocator), member 5 (SLC25A5), nuclear gene encoding mitochondrial protein, mRNA
1473	14065	26602	11.5	3.0E-66	4502088	NT	Homo sapiens solute carrier family 25 (mitochondrial carrier; adenine nucleotide translocator), member 5 (SLC25A5), nuclear gene encoding mitochondrial protein, mRNA
2026	14608	27173	1	3.0E-66	N55323.1	EST_HUMAN	Y27g12.1 Scores_multiple_sclerosis_2NbhMSP Homo sapiens cDNA clone IMAGE:284326 5' similar to SW:H2B1_TIGCA P35088 HISTONE H2B.1/H2B.2 [2] PIR:B56612 ;
2026	14608	27174	1	3.0E-66	N55323.1	EST_HUMAN	Y27g12.1 Scores_multiple_sclerosis_2NbhMSP Homo sapiens cDNA clone IMAGE:284326 5' similar to SW:H2B1_TIGCA P35088 HISTONE H2B.1/H2B.2 [2] PIR:B56612 ;
2026	14608	27175	1	3.0E-66	N55323.1	EST_HUMAN	Y27g12.1 Scores_multiple_sclerosis_2NbhMSP Homo sapiens cDNA clone IMAGE:284326 5' similar to SW:H2B1_TIGCA P35088 HISTONE H2B.1/H2B.2 [2] PIR:B56612 ;
2732	15287	27854	3.43	3.0E-66	1141880	NT	Homo sapiens TGF(beta)-induced transcription factor 2 (TGIF2), mRNA
3151	15765	28232	6.89	3.0E-66	7662223	NT	Homo sapiens KIAA0649 gene product (KIAA0649), mRNA
5658	18285	30763	0.9	3.0E-66	AB020896.1	NT	Homo sapiens mRNA for KIAA0892 protein, partial cds
5946	18566	31296	2.07	3.0E-66	11417946	NT	Homo sapiens NIPSNAP, C. elegans, homolog 1 (NIPSNAP1), mRNA
5946	18566	31297	2.07	3.0E-66	11417946	NT	Homo sapiens NIPSNAP, C. elegans, homolog 1 (NIPSNAP1), mRNA
9444	21970	34919	0.59	3.0E-66	AK024453.1	NT	Homo sapiens mRNA for FLJ00045 protein, partial cds
9635	22135	35100	0.89	3.0E-66	11417118	NT	Homo sapiens KIAA0433 protein (KIAA0433), mRNA
9865	22480	35464	0.8	3.0E-66	7019480	NT	Homo sapiens protocadherin beta 1 (PCDH-beta1), mRNA
10415	22909	35908	0.92	3.0E-66	AF155658.1	NT	Homo sapiens molybdenum cofactor biosynthesis protein E (MCPBE) mRNA, complete cds

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11384	23836	36898	9.34	3.0E-66	5453948	NT	Homo sapiens protein phosphatase 2, regulatory subunit B (B56), alpha isoform (PPP2R5A) mRNA
55	12735	25203	1.34	2.0E-66	7657334	NT	Homo sapiens Mitshapen/NIK-related kinase (MINK), mRNA
55	12735	25204	1.34	2.0E-66	7657334	NT	Homo sapiens Mitshapen/NIK-related kinase (MINK), mRNA
447	12676	25132	1.21	2.0E-66	4505524	NT	Homo sapiens origin recognition complex, subunit 5 (yeast homolog)-like (ORC5L) mRNA, and translated products
447	12676	25133	1.21	2.0E-66	4505524	NT	Homo sapiens origin recognition complex, subunit 5 (yeast homolog)-like (ORC5L) mRNA, and translated products
1866	14452	27011	1.73	2.0E-66	AL163301.2	NT	Homo sapiens chromosome 21 segment HS21C101
3002	15618	28096	1.55	2.0E-66	X65856.1	NT	H. sapiens pseudogene for the low affinity IL-8 receptor
3572	16176	28658	0.97	2.0E-66	8923280	NT	Homo sapiens hypothetical protein FLJ20308 (FLJ20308), mRNA
3828	18428	28889	0.72	2.0E-66	AL117233.1	NT	Novel human gene mapping to chromosome 1
4139	16731	29184	0.57	2.0E-66	AF108389.1	NT	Homo sapiens sodium/calcium exchanger isoform NaCa3 (NCX1) mRNA, complete cds
4760	17341	29788	16.35	2.0E-66	AJ133287.2	NT	Homo sapiens HLA-B gene for human leucocyte antigen B
4760	17341	29789	16.35	2.0E-66	AJ133287.2	NT	Homo sapiens HLA-B gene for human leucocyte antigen B
5982	18602	31336	0.8	2.0E-66	AW968854.1	EST_HUMAN	EST380930 MAGE resequences, MAGJ Homo sapiens cDNA
5982	18602	31337	0.8	2.0E-66	AW968854.1	EST_HUMAN	EST380930 MAGE resequences, MAGJ Homo sapiens cDNA
8781	21320	34244	2.24	2.0E-66	N45480.1	EST_HUMAN	Y58c02.r1 Soares multiple sclerosis 2NBMSP Homo sapiens cDNA clone IMAGE:277828 5'
12132	25057		1.8	2.0E-66	11418318	NT	Homo sapiens G-2 and S-phase expressed 1 (GTSE1), mRNA
2919	15536	28010	1.65	1.0E-66	AV717817.1	EST_HUMAN	AV717817 DCB Homo sapiens cDNA clone DCBADC07 5'
2919	15536	28011	1.65	1.0E-66	AV717817.1	EST_HUMAN	AV717817 DCB Homo sapiens cDNA clone DCBADC07 5'
4474	15536	28010	3.57	1.0E-66	AV717817.1	EST_HUMAN	AV717817 DCB Homo sapiens cDNA clone DCBADC07 5'
4474	15536	28011	3.57	1.0E-66	AV717817.1	EST_HUMAN	AV717817 DCB Homo sapiens cDNA clone DCBADC07 5'
5583	18214	30863	5.48	1.0E-66	BE765232.1	EST_HUMAN	802152966F1 NIH_MGC 81 Homo sapiens cDNA clone IMAGE:4284151 5'
5952	18574	31307	0.68	1.0E-66	BE765232.1	EST_HUMAN	IL2-NT0101-280700-118-E04 NT0101 Homo sapiens cDNA
5952	18574	31308	0.68	1.0E-66	BE765232.1	EST_HUMAN	IL2-NT0101-280700-118-E04 NT0101 Homo sapiens cDNA
7018	19516	32338	0.95	1.0E-66	BF328623.1	EST_HUMAN	RC5-BN0193-010900-034-G06 BN0193 Homo sapiens cDNA
8395	20635	33857	1.6	1.0E-66	AA668858.1	EST_HUMAN	aa80604.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:827282 3'
9347	21861	34809	0.74	1.0E-66	AA018828.1	EST_HUMAN	z857612.r1 Soares retina N2b4HR Homo sapiens cDNA clone IMAGE:363118 5'
10273	22768	35756	0.75	1.0E-66	AV748749.1	EST_HUMAN	AV748749 NPC Homo sapiens cDNA clone NPCBVA05 5'
10273	22768	35757	0.75	1.0E-66	AV748749.1	EST_HUMAN	AV748749 NPC Homo sapiens cDNA clone NPCBVA05 5'
10509	23003	36011	0.51	1.0E-66	BE044596.1	EST_HUMAN	h047h02.x1 Soares NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:3040563 3'
10821	23342	36357	1.96	1.0E-66	AF111167.2	NT	Homo sapiens jun dimerization protein gene, partial cds; cfos gene, complete cds; and unknown gene

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11901	24240		3	9.0E-67	11418177	NT	Homo sapiens Ran GTPase activating protein 1 (RANGAP1), mRNA
403	13078	25570	3.59	7.0E-67	AW162232.1	EST_HUMAN	au75602.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2782083 3' similar to gb:M37104 ATP SYNTHASE COUPLING FACTOR 6, MITOCHONDRIAL PRECURSOR (HUMAN);
1425	14018	26547	1.75	7.0E-67	AA383416.1	EST_HUMAN	EST86812 Testis 1 Homo sapiens cDNA 5' and similar to similar to C. elegans hypothetical protein, cosmid ZK353
1801	14193	26724	1.25	7.0E-67	W85947.1	EST_HUMAN	zh5605.r1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:416049 5'
1801	14193	26725	1.25	7.0E-67	W85947.1	EST_HUMAN	zh5605.r1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:416049 5'
2836	13078	25570	3.15	7.0E-67	AW162232.1	EST_HUMAN	au75602.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2782083 3' similar to gb:M37104 ATP SYNTHASE COUPLING FACTOR 6, MITOCHONDRIAL PRECURSOR (HUMAN);
6231	18840	31612	0.98	7.0E-67	10190695	NT	Homo sapiens zinc finger protein 304 (ZNF304), mRNA
8416	19019	31802	1.79	7.0E-67	11425572	NT	Homo sapiens adaptor-related protein complex 2, beta 1 subunit (AP2B1), mRNA
8416	19019	31803	1.79	7.0E-67	11425572	NT	Homo sapiens adaptor-related protein complex 2, beta 1 subunit (AP2B1), mRNA
6823	19413	32230	1.03	7.0E-67	4885084	NT	Homo sapiens ATPase, H ⁺ transporting, lysosomal (vacuolar proton pump) non-catalytic accessory protein 1A (110/116kD) (ATP6N1A), mRNA
7627	20139	33018	0.99	7.0E-67	11419212	NT	Homo sapiens mitochondrial carrier family protein (LOC55972), mRNA
7627	20139	33019	0.98	7.0E-67	11419212	NT	Homo sapiens mitochondrial carrier family protein (LOC55972), mRNA
8012	20554	33457	0.49	7.0E-67	4826895	NT	Homo sapiens phosphodiesterase 1/nucleotide pyrophosphatase 3 (PDNIP3) mRNA
8265	20808	33724	0.8	7.0E-67	4557732	NT	Homo sapiens latent transforming growth factor beta binding protein 2 (LTBP2) mRNA
8862	21401	34328	0.76	7.0E-67	10835044	NT	Homo sapiens retinaldehyde dehydrogenase 2 (RALDH2), mRNA
11525	23973	37043	2.92	7.0E-67	U82486.1	NT	Human cytochrome oxidase subunit 1a (COX8A(P) pseudogene, complete cds
11675	24094	37147	2.95	7.0E-67	11430460	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
11675	24094	37148	2.95	7.0E-67	11430460	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
12159	24399	30979	1.44	7.0E-67	AB011399.1	NT	Homo sapiens gene for AF-6, complete cds
585	13215	25692	1.94	6.0E-67	X89886.1	NT	H. sapiens mRNA for acetyl-CoA carboxylase
828	13445	25952	1.64	6.0E-67	Z17227.1	NT	Homo sapiens mRNA for transmembrane receptor protein
1316	13810	28430	1.2	6.0E-67	Y14320.1	NT	Homo sapiens PMP89 gene, exons 3, 4, 5, 6 & 7
3485	16090	28562	1.47	6.0E-67	4507332	NT	Homo sapiens Synapsin III (SYN3) mRNA, and translated products
3485	16090	28563	1.47	6.0E-67	4507332	NT	Homo sapiens Synapsin III (SYN3) mRNA, and translated products
4205	16794	29240	0.74	6.0E-67	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
4205	16794	29241	0.74	6.0E-67	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
4815	17363	29845	3.86	6.0E-67	7657020	NT	Homo sapiens DKFZp434P211 protein (DKFZP434P211), mRNA
4815	17363	29846	3.86	6.0E-67	7657020	NT	Homo sapiens DKFZp434P211 protein (DKFZP434P211), mRNA
3258	15870	28350	2.85	5.0E-67	AF009680.1	NT	Homo sapiens T cell receptor beta locus, TORBV7S3A2 to TORBV12S2 region
10863	23384		1.9	5.0E-67	BE010038.1	EST_HUMAN	PM3-BN0176-10040-001-g04 BN0178 Homo sapiens cDNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1373	13667	26494	1.16	4.0E-67	R90819.1	EST_HUMAN	Yn02d11.1 Soares adult brain N2b4HB55Y Homo sapiens cDNA clone IMAGE:167263 5'
7964	20506	33413	0.98	4.0E-67	A1733032.1	EST_HUMAN	q26c05.x5 NCL_CGAP_Kid3 Homo sapiens cDNA clone IMAGE:1493288 3' similar to SW:Z33A_HUMAN
8322	20863		1.3	4.0E-67	BF357321.1	EST_HUMAN	Q06730 ZINC FINGER PROTEIN 33A:
10942	23458		1.92	4.0E-67	AA714294.1	EST_HUMAN	RC0-HT0934-150900-026-c03 HT0934 Homo sapiens cDNA
2839	13284	25765	5.7	3.0E-67	AA333788.1	EST_HUMAN	mw06a01.s1 NCL_CGAP_SS1 Homo sapiens cDNA clone IMAGE:1238472 3' similar to TR:O10385 O10385
4804	17382	29832	3.38	3.0E-67	AW869159.1	EST_HUMAN	PRO-POL-DUTPASE POLYPROTEIN:
4831	17409		0.93	3.0E-67	AL163279.2	NT	EST37903 Embryo, 9 week Homo sapiens cDNA 5' end
8122	20663	33573	1.17	3.0E-67	BF196068.1	EST_HUMAN	MR3-SN0066-040500-008-f01 SN0066 Homo sapiens cDNA
11139	23647		22.61	3.0E-67	AA927874.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C079
201	12862	25346	1.74	2.0E-67	BE348354.1	EST_HUMAN	h81f05.x1 NCL_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3134913 3' similar to SW:RHOP_MOUSE
878	13492	26010	4.99	2.0E-67	AW816405.1	EST_HUMAN	Q61085 GTP-RHO BINDING PROTEIN 1:
1144	13747		1.64	2.0E-67	AF167460.1	NT	cm18b07.s1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1541365 3'
1928	14512	27069	1.5	2.0E-67	BE303037.1	EST_HUMAN	hw16g09.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3183136 3' similar to WP:F23H11.9
1928	14512	27070	1.5	2.0E-67	BE303037.1	EST_HUMAN	CE09617:
2428	14995	27570	2.84	2.0E-67	AF309581.1	NT	QV4-ST0234-181199-037-f05 ST0234 Homo sapiens cDNA
2475	15042	27610	0.95	2.0E-67	4758795	NT	Homo sapiens double stranded RNA activated protein kinase (PKR) gene, exons 2a, 2, 3, and 4
3514	16119	28599	4.46	2.0E-67	AA625755.1	EST_HUMAN	ba72g05.y1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:2905976 5' similar to TR:O94892 O94892
4074	16670	28131	2.78	2.0E-67	AL163300.2	NT	KIAA0798 PROTEIN.:
6222	18831	31603	0.83	2.0E-67	AL049784.1	NT	KIAA0798 PROTEIN.:
6273	18881	31649	5.18	2.0E-67	BF240758.1	EST_HUMAN	Homo sapiens KRAB zinc finger protein ZFQR mRNA, complete cds
6438	19040	31827	2.25	2.0E-67	AB051763.1	NT	Homo sapiens developmentally regulated GTP-binding protein 1 (DRG1), mRNA
6438	19040	31828	2.25	2.0E-67	AB051763.1	NT	z191g01.s1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:745392 3'
8463	21032	33952	0.96	2.0E-67	AA334609.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C100
8463	21032	33953	0.96	2.0E-67	AA334609.1	EST_HUMAN	Novel human gene mapping to chromosome 13
8927	21465	34381	1.09	2.0E-67	AW602635.1	EST_HUMAN	601875351F1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:4091893 5'
8927	21465	34382	1.09	2.0E-67	AW602635.1	EST_HUMAN	Homo sapiens mRNA for NADPH-cytochrome P-450 reductase, complete cds
9486	21943	34890	1.24	2.0E-67	AV731333.1	EST_HUMAN	Homo sapiens mRNA for NADPH-cytochrome P-450 reductase, complete cds
9625	22125	35089	1.19	2.0E-67	AW293924.1	EST_HUMAN	EST38850 Embryo, 9 week Homo sapiens cDNA 5' end similar to cerebellin
							EST38850 Embryo, 9 week Homo sapiens cDNA 5' end similar to cerebellin
							RC4-BT0566-170100-011-c07 BT0566 Homo sapiens cDNA
							RC4-BT0566-170100-011-c07 BT0566 Homo sapiens cDNA
							AV731333 HTF Homo sapiens cDNA clone HTFARD03 5'
							UI-H-B12-ahm-e-10-0-U1.s1 NCL_CGAP_Sub4 Homo sapiens cDNA clone IMAGE:2727283 3'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10781	23305	36313	1.57	2.0E-67	BF685788.1	EST_HUMAN	602140470F1 NIH_MGC_48 Homo sapiens cDNA clone IMAGE:4301705 5'
10934	25127		3.62	2.0E-67	11438448	NT	Homo sapiens KIAA0085 protein (KIAA0085), mRNA
11107	23617	36659	1.85	2.0E-67	BE285714.1	EST_HUMAN	601175762F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3531038 5'
11330	23028	36037	2.01	2.0E-67	BF377169.1	EST_HUMAN	PM2-TN0103-040900-001-c02 TN0103 Homo sapiens cDNA
12034	24911	30714	2.53	2.0E-67	11418189	NT	Homo sapiens thyroid autoantigen 70kD (Ku antigen) (G22P1), mRNA
12347	24528	30925	2.26	2.0E-67	11417877	NT	Homo sapiens gamma-glutamyltransferase 1 (GGT1), mRNA
274	12631	25418	3.31	1.0E-67	4502166	NT	Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA
737	13357	25851	1.2	1.0E-67	AA702794.1	EST_HUMAN	z90b04.s1 Scarsa fetal_liver_spleen_INFLS_S1 Homo sapiens cDNA clone IMAGE:448015 3'
2220	14795	27398	1.73	8.0E-68	BE870732.1	EST_HUMAN	601448558F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3652264 5'
3637	16535	29001	5.37	8.0E-68	AA208456.1	EST_HUMAN	z92h10.r1 Stratagene INT neuron (#937233) Homo sapiens cDNA clone IMAGE:848163 5' similar to SW:SAV_SULAC Q07590 SAV PROTEIN ;
3637	16535	28002	5.37	8.0E-68	AA209456.1	EST_HUMAN	z92h10.r1 Stratagene INT neuron (#937233) Homo sapiens cDNA clone IMAGE:848163 5' similar to SW:SAV_SULAC Q07590 SAV PROTEIN ;
8045	20597	33493	0.53	7.0E-68	AI810505.1	EST_HUMAN	w689e03.x1 NCI CGAP_P128 Homo sapiens cDNA clone IMAGE:2312890 3'
10348	22840	35838	2.53	6.0E-68	11422086	NT	Homo sapiens brefeldin A-inhibited guanine nucleotide-exchange protein 2 (BIG2), mRNA
12349	24530		3.32	6.0E-68	BE612554.1	EST_HUMAN	601452087F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3855781 5'
835	15389	25960	0.87	5.0E-68	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
835	15389	25961	0.87	5.0E-68	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
852	13468	25977	4.54	5.0E-68	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
852	13468	25978	4.54	5.0E-68	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
2808	15390	27927	72.53	5.0E-68	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
3181	15784	28266	3.22	5.0E-68	AB037852.1	NT	Homo sapiens mRNA for KIAA1431 protein, partial cds
4260	16846		0.63	5.0E-68	4826967	NT	Homo sapiens retinoblastoma-binding protein 2 (RBBP2) mRNA
4590	17173	28818	1.21	5.0E-68	AL157845.1	EST_HUMAN	DKFZp47D207_r1 547 (synonym: hbr1) Homo sapiens cDNA clone DKFZp547D207 5'
5111	17683		8.82	4.0E-68	P04406	SWISSPROT	GLYCERALDEHYDE 3-PHOSPHATE DEHYDROGENASE, LIVER
6118	18734	31487	0.76	4.0E-68	AF157063.1	NT	Homo sapiens sedlin (SED1) gene, exon 4
6870	19604	32437	6.01	4.0E-68	11055991	NT	Homo sapiens serine carboxypeptidase 1 precursor protein (HSCP1), mRNA
6870	19604	32438	6.01	4.0E-68	11055991	NT	Homo sapiens serine carboxypeptidase 1 precursor protein (HSCP1), mRNA
7674	20185	33073	0.92	4.0E-68	7661683	NT	Homo sapiens DKFZP586L0724 protein (DKFZP586L0724), mRNA
8970	21508	34428	5.04	4.0E-68	D63479.2	NT	Homo sapiens mRNA for KIAA0145 protein, partial cds
8970	21508	34430	5.04	4.0E-68	D63479.2	NT	Homo sapiens mRNA for KIAA0145 protein, partial cds
9106	21842	34582	2.9	4.0E-68	AB040918.1	NT	Homo sapiens mRNA for KIAA1485 protein, partial cds
10882	23403	36420	6.14	4.0E-68	4506282	NT	Homo sapiens protein tyrosine phosphatase type IVA, member 1 (PTP4A1) mRNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10882	23403	36421	5.14	4.0E-68	4506282	NT	Homo sapiens protein tyrosine phosphatase type IVA, member 1 (PTP4A1) mRNA
12225	24446	30953	2.91	4.0E-68	114179668	NT	Homo sapiens SEC14 (S. cerevisiae)-like 2 (SEC14L2), mRNA
3722	16323	28790	2.56	3.0E-68	AF236082.1	NT	Mus musculus G-protein coupled receptor GPR73 (Gpr73) mRNA, complete cds
9378	20317		6.15	3.0E-68	A1342323.1	EST_HUMAN	q38h02.x1 Soares_fetal_lung_NbHL19W Homo sapiens cDNA clone IMAGE:1950291 3' similar to contains THR12 THR repetitive element.
10386	22890	35884	1.77	3.0E-68	F28784.1	EST_HUMAN	HSPD18178 HM3 Homo sapiens cDNA clone s3000023D09
12571	24829		2.05	3.0E-68	AW939485.1	EST_HUMAN	QV1-DT0072-010200-056-H06 DT0072 Homo sapiens cDNA
2887	18011		27.71	2.0E-68	D00522.1	NT	Cricetulus longicaudatus mRNA for EF-1 alpha, complete cds
4097	18692	29149	0.78	2.0E-68	BE675766.1	EST_HUMAN	711502.x1 NCL_CGAP_CLL1 Homo sapiens cDNA clone IMAGE:3294747 3' similar to TR:O80828 O80828 HYPOTHETICAL 88.8 KD PROTEIN.
4789	17368	29821	1.96	2.0E-68	AB008881.1	NT	Homo sapiens gene for activin receptor type IIB, complete cds
6957	18534		8.98	2.0E-68	R45088.1	EST_HUMAN	y338g04.s1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:34896 3'
7123	19483	32280	4.81	2.0E-68	BF035316.1	EST_HUMAN	601458514F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3862034 5'
8879	21417	34341	0.84	2.0E-68	Q05859	SWISSPROT	FORMIN 4 (LIMB DEFORMITY PROTEIN)
10494	22988	35996	0.46	2.0E-68	N78483.1	EST_HUMAN	y278d07.r1 Soares_multiple_sclerosis_2NbrMSP Homo sapiens cDNA clone IMAGE:289165 5'
11782	25077		2.11	2.0E-68	BE897376.1	EST_HUMAN	601437387F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3922192 5'
12639	24714		1.84	2.0E-68	AW016803.1	EST_HUMAN	UI-H-B10-eam-b-05-0-UJ.s1 NCL_CGAP_Sub1 Homo sapiens cDNA clone IMAGE:2709824 3'
83	12759	25242	0.78	1.0E-68	4505222	NT	Homo sapiens meningioma (disrupted in balanced translocation) 1 (MN1), mRNA
318	12972	25461	12.22	1.0E-68	AW816405.1	EST_HUMAN	QV4-ST0234-181199-037-r05 ST0234 Homo sapiens cDNA
2294	14968	27443	0.89	1.0E-68	AB011149.1	NT	Homo sapiens mRNA for KIAA0577 protein, complete cds
2294	14968	27444	0.89	1.0E-68	AB011149.1	NT	Homo sapiens mRNA for KIAA0577 protein, complete cds
2765	15338	27908	1.12	1.0E-68	AW451832.1	EST_HUMAN	UI-H-B13-alk-f-01-0-UJ.s1 NCL_CGAP_Sub5 Homo sapiens cDNA clone IMAGE:2737272 3'
5178	17745	30174	0.86	1.0E-68	AA897343.1	EST_HUMAN	ai47g12.s1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1460518 3'
5233	17797	30215	0.88	1.0E-68	BE296032.1	EST_HUMAN	601177002F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3532344 5'
5525	18157	30572	1.51	1.0E-68	7662349	NT	Homo sapiens cell recognition molecule Caspr2 (KIAA0869), mRNA
10085	22580	35573	0.49	1.0E-68	11419429	NT	Homo sapiens similar to ectonucleotide pyrophosphatase/phosphodiesterase 3 (H. sapiens) (LOC63214), mRNA
10732	23258	36274	2.83	1.0E-68	11418069	NT	Homo sapiens phosphodiesterase 7B (PDE7B), mRNA
10732	23258	36275	2.83	1.0E-68	11418069	NT	Homo sapiens phosphodiesterase 7B (PDE7B), mRNA
10783	23307	36314	3.41	1.0E-68	L76416.1	NT	Homo sapiens MIF2 suppressor (HSMIT3) mRNA, complete cds
11072	23584	36825	1.72	1.0E-68	11433277	NT	Homo sapiens myosin IC (MYO1C), mRNA
11179	23685	36731	2.23	1.0E-68	U50319.1	NT	Human protein kinase C substrate 80K-H (PRKGSH) gene, exon 4-5
11179	23685	36732	2.23	1.0E-68	U50319.1	NT	Human protein kinase C substrate 80K-H (PRKGSH) gene, exon 4-5
11517	23965	37036	2.1	1.0E-68	11418431	NT	Homo sapiens CGI-76 protein (LOC51632), mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11517	23965	37037	2.1	1.0E-68	11418431	NT	Homo sapiens CGI-76 protein (LOC51632), mRNA
12330	12759	25242	2.37	1.0E-68	4505222	NT	Homo sapiens meningioma (disrupted in balanced translocation) 1 (MN1), mRNA
12818	24697		1.62	1.0E-68	11418213	NT	Homo sapiens ADP-ribosylation factor GTPase activating protein 1 (ARFGAP1), mRNA
23	12702	25158	13.45	9.0E-69	5031978	NT	Homo sapiens pre-B-cell colony-enhancing factor (PBEF) mRNA
23	12702	25159	13.45	9.0E-69	5031978	NT	Homo sapiens pre-B-cell colony-enhancing factor (PBEF) mRNA
1065	13670	26180	1.44	9.0E-69	5031980	NT	Homo sapiens 26S proteasome-associated pad1 homolog (POH1) mRNA
1065	13670	26181	1.44	9.0E-69	5031980	NT	Homo sapiens 26S proteasome-associated pad1 homolog (POH1) mRNA
4208	18797	29245	0.69	9.0E-69	4757867	NT	Homo sapiens v-raf murine sarcoma viral oncogene homolog B1 (BRAF) mRNA
5384	17943	30356	0.9	9.0E-69	AF051717.1	NT	Homo sapiens T-cell receptor gamma V1 gene region
10769	23283		11.7	9.0E-69	AU117241.1	EST_HUMAN	AU117241 HEMBA1 Homo sapiens cDNA clone HEMBA1000988 5'
3433	16041		1.56	8.0E-69	AJ237744.1	NT	Homo sapiens RIBIIR gene (partial), exon 12
6493	19094	31878	5.18	7.0E-69	9966912	NT	Homo sapiens actin-related protein 3-beta (ARP3BETA), mRNA
7804	20347	33254	22.34	6.0E-69	AI192764.1	EST_HUMAN	q62h01.x1 Soares_fetal_lung_NbHL19W Homo sapiens cDNA clone IMAGE:1743801 3' similar to gb:L11566 60S RIBOSOMAL PROTEIN L18 (HUMAN);
7804	20347	33255	22.34	6.0E-69	AI192764.1	EST_HUMAN	q62h01.x1 Soares_fetal_lung_NbHL19W Homo sapiens cDNA clone IMAGE:1743801 3' similar to
8904	21442	34365	0.98	5.0E-69	AA828039.1	EST_HUMAN	cd80a03.s1 NCI_CGAP_GCBT Homo sapiens cDNA clone IMAGE:1372300 3'
546	13177		1.07	4.0E-69	AI873630.1	EST_HUMAN	wm28h11.x1 NCI_CGAP_Ut4 Homo sapiens cDNA clone IMAGE:2437125 3'
5834	24751	31283	1.56	4.0E-69	BE561063.1	EST_HUMAN	601344705F1 NIH_MGC 8 Homo sapiens cDNA clone IMAGE:3677641 5'
6009	18629	31384	4.7	4.0E-69	AI764973.1	EST_HUMAN	wh57b06.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2384819 3' similar to TR:O55137
6739	19333	32139	2.45	4.0E-69	4557732	NT	Q55137 ACYL-COA THIOESTERASE ;
6739	19333	32140	2.45	4.0E-69	4557732	NT	Homo sapiens latent transforming growth factor beta binding protein 2 (LTBP2) mRNA
8845	21384	34309	0.59	4.0E-69	AU119634.1	EST_HUMAN	Homo sapiens latent transforming growth factor beta binding protein 2 (LTBP2) mRNA
12863	24733		2.96	4.0E-69	AI187952.1	EST_HUMAN	AU119634 HEMBA1 Homo sapiens cDNA clone HEMBA1006283 5'
409	13084	25577	4.92	3.0E-69	BE258012.1	EST_HUMAN	q613f05.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1738881 3'
640	13263	25739	2.24	3.0E-69	AF221712.1	NT	601110371F1 NIH_MGC 18 Homo sapiens cDNA clone IMAGE:3351352 5'
							Homo sapiens Smad- and Olf-interacting zinc finger protein mRNA, partial cds
1602	14184		1.13	3.0E-69	T80514.1	EST_HUMAN	yd08a02.r1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:24880 5' similar to SP:A48836
2415	14983		1.34	3.0E-69	5729910	NT	A48836 SPEGF III=EGF REPEAT-CONTAINING FIBROPELIN-LIKE PROTEIN - SEA URCHIN ;
4888	17270		0.77	3.0E-69	T96234.1	EST_HUMAN	Homo sapiens lymphatic vessel endothelial hyaluronan receptor 1 (LYVE-1) mRNA
5407	17270		0.61	3.0E-69	T96234.1	EST_HUMAN	ye48h04.r1 Soares fetal liver spleen 1N1FLS Homo sapiens cDNA clone IMAGE:121015 5'
5452	18021	37141	1.37	3.0E-69	11418185	NT	ye48h04.r1 Soares fetal liver spleen 1N1FLS Homo sapiens cDNA clone IMAGE:121015 5'
							Homo sapiens acylase 2, mitochondrial (ACO2), mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6894	19828		0.89	3.0E-68	AJ277557.1	NT	Homo sapiens dNT-2 gene for mitochondrial 5'(3')-deoxyribonucleotidase (dNT-2 gene), exons 1-5
7407	19832	32796	0.87	3.0E-69	AF095703.1	NT	Homo sapiens short chain L-3-hydroxyacyl-CoA dehydrogenase precursor (HADHSC) gene, nuclear gene
7449	19873	32840	1.42	3.0E-69	U52351.1	NT	encoding mitochondrial protein, complete cds
7554	20073	32949	7.75	3.0E-69	AF268075.1	NT	Homo sapiens arm-repeat protein NPRAP/neurongin (CTNND2) mRNA, partial cds
8313	20854	33780	0.87	3.0E-69	AW138646.1	EST_HUMAN	Homo sapiens TRAF6-binding protein T6BP mRNA, complete cds
8703	21242		1.8	3.0E-69	AA376399.1	EST_HUMAN	U1-H-B11-aw-g-01-0-UI.s1 NCL_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2715840 3'
8907	21445	34367	0.5	3.0E-69	8923248	NT	EST88807 HSC172 cells II Homo sapiens cDNA 5' end similar to similar to ribosomal protein S18
9334	21848	34797	1.77	3.0E-69	X13223.1	NT	Homo sapiens hypothetical protein FLJ20275 (FLJ20275), mRNA
9452	21978	34930	8.92	3.0E-69	X06233.1	NT	H. sapiens mRNA for N-acetylglucosaminide-(beta 1-4)-galactosyltransferase
9743	22241	35222	0.55	3.0E-69	5730036	NT	Human mRNA for calcium-binding protein in macrophages (MRP-14) macrophage migration inhibitory factor (MIF)-related protein
10520	23058	36088	3.93	3.0E-69	11432120	NT	Homo sapiens SEC10 (S. cerevisiae)-like 1 (SEC10L1), mRNA
10721	23249		12.34	3.0E-69	AA376399.1	EST_HUMAN	Homo sapiens ribosomal protein S15a (RPS15A), mRNA
11813	24185		3.86	3.0E-69	11419157	NT	EST88807 HSC172 cells II Homo sapiens cDNA 5' end similar to similar to ribosomal protein S18
134	13062	25556	1.07	2.0E-69	AF160252.1	NT	Homo sapiens HGC6.2 protein (HGC6.2), mRNA
134	13062	25557	1.07	2.0E-69	AF160252.1	NT	Homo sapiens KIAA0553 protein gene, complete cds; and alpha1b protein gene, partial cds
429	13062	25556	5.07	2.0E-69	AF160252.1	NT	Homo sapiens KIAA0553 protein gene, complete cds; and alpha1b protein gene, partial cds
429	13062	25557	5.07	2.0E-69	AF160252.1	NT	Homo sapiens KIAA0553 protein gene, complete cds; and alpha1b protein gene, partial cds
1928	14513	27071	1.46	2.0E-69	BE257857.1	EST_HUMAN	Homo sapiens KIAA0553 protein gene, complete cds; and alpha1b protein gene, partial cds
2869	15487		2.88	2.0E-69	AA431157.1	EST_HUMAN	601109444FT NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3350074 5'
8489	21028	33946	0.82	2.0E-69	AA114270.1	EST_HUMAN	zw71g02.1 Scores_testis_NHT Homo sapiens cDNA clone IMAGE:781682 5'
1740	14330	28874	1.89	1.0E-69	AF053788.1	NT	zm28g01.1 Stralagene pancreas (#637208) Homo sapiens cDNA clone IMAGE:527088 5'
5173	17740		0.58	1.0E-69	BE409094.1	EST_HUMAN	Rattus norvegicus brain specific cortactin-binding protein CBP90 mRNA, partial cds
6201	18811	31580	0.76	1.0E-69	BE902501.1	EST_HUMAN	601301284FT NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3635781 5'
6201	18811	31581	0.76	1.0E-69	BE902501.1	EST_HUMAN	601675788FT NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3958532 5'
6717	19311	32114	4.38	1.0E-69	AW363986.1	EST_HUMAN	601675788FT NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3958532 5'
6908	19842	32478	1.4	1.0E-69	7662263	NT	QV0-TT0010-031199-045-c07 TT0010 Homo sapiens cDNA
6908	19842	32479	1.4	1.0E-69	7662263	NT	Homo sapiens KIAA0716 gene product (KIAA0716), mRNA
6924	19583	32412	3.33	1.0E-69	AB032973.1	NT	Homo sapiens KIAA0716 gene product (KIAA0716), mRNA
6924	19583	32413	3.33	1.0E-69	AB032973.1	NT	Homo sapiens mRNA for KIAA1147 protein, partial cds
10077	22572	35566	5.1	1.0E-69	BE245070.1	EST_HUMAN	Homo sapiens mRNA for KIAA1147 protein, partial cds
							TCBAP1E2878 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project-TCBA Homo sapiens cDNA clone TCBAP2678

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10077	22572	35567	5.1	1.0E-69	BE245070.1	EST_HUMAN	TCBAP1E2678 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP2678
10169	22664	35659	1.41	1.0E-69	AB014607.1	NT	Homo sapiens mRNA for KIAA0707 protein, partial cds
10313	22807	35799	0.47	1.0E-69	BF528428.1	EST_HUMAN	602043782F1 NCI_CGAP_Bn67 Homo sapiens cDNA clone IMAGE:4181325 5'
10751	23275		14.22	1.0E-69	4504918	NT	Homo sapiens keratin 8 (KRT8) mRNA
11745	24144	36768	1.61	1.0E-69	BF125897.1	EST_HUMAN	601762802F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:4025785 5'
12169	24408		4.69	1.0E-69	AB009994.1	EST_HUMAN	wf64608.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2360390 3' similar to contains Alu repetitive element; contains element MIR repetitive element
2370	15484	27513	1.52	8.0E-70	AA230303.1	EST_HUMAN	nc13d12.1 NCI_CGAP_P1 Homo sapiens cDNA clone IMAGE:1008023
4463	17049	29493	1.81	8.0E-70	L77566.1	NT	Homo sapiens DGS-1 mRNA, 3' end
1849	14437	26893	1.85	7.0E-70	AA97807.1	EST_HUMAN	tm89701.x1 NCI_CGAP_Bn25 Homo sapiens cDNA clone IMAGE:2168305 3'
1849	14437	26994	1.65	7.0E-70	AA97807.1	EST_HUMAN	tm89701.x1 NCI_CGAP_Bn25 Homo sapiens cDNA clone IMAGE:2168305 3'
1874	14558	27115	1.84	7.0E-70	AA282855.1	EST_HUMAN	Z16104.1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:713239 5'
2109	14687		3.14	7.0E-70	5031868	NT	Homo sapiens tumor suppressor deleted in oral cancer-related 1 (DOC-1R) mRNA
4309	16895	29339	4.83	7.0E-70	4757723	NT	Homo sapiens adenylate cyclase 3 (ADCY3) mRNA
5674	18301	30782	5.56	7.0E-70	AB032369.1	NT	Homo sapiens MIST mRNA, partial cds
5674	18301	30783	5.56	7.0E-70	AB032369.1	NT	Homo sapiens MIST mRNA, partial cds
7004	19502	32321	3.22	7.0E-70	AJ000052.1	NT	Homo sapiens gene encoding splicing factor SF1, exons 2-8
7745	20253	33147	0.67	7.0E-70	11417308	NT	Homo sapiens titin immunoglobulin domain protein (myotilin) (TTID), mRNA
8370	20910	33829	2.87	7.0E-70	AB037715.1	NT	Homo sapiens mRNA for KIAA1294 protein, partial cds
8370	20910	33830	2.87	7.0E-70	AB037715.1	NT	Homo sapiens mRNA for KIAA1294 protein, partial cds
8658	21195	34114	3.59	7.0E-70	M74099.1	NT	Human displacement protein (CCAAT) mRNA
8658	21195	34115	3.59	7.0E-70	M74099.1	NT	Human PBX3 mRNA
9084	21620	34555	3.99	7.0E-70	X59841.1	NT	Human PBX3 mRNA
9084	21620	34556	3.99	7.0E-70	X59841.1	NT	Human PBX3 mRNA
9356	20295	33194	3.84	7.0E-70	AF153715.1	NT	Homo sapiens phospholipid scramblase 1 gene, exon 1 and 5' flanking region
9382	20320	33223	2.01	7.0E-70	11525984	NT	Homo sapiens karyopherin beta 2b, transportin (TRN2), mRNA
9382	20320	33224	2.01	7.0E-70	11525984	NT	Homo sapiens karyopherin beta 2b, transportin (TRN2), mRNA
9575	22075	35038	1.33	7.0E-70	4557624	NT	Homo sapiens glutamate-cysteine ligase (gamma-glutamylcysteine synthetase), catalytic (72 kD) (GLCLC) mRNA
10199	22694	35696	0.61	7.0E-70	AB036428.1	NT	Homo sapiens NDST4 mRNA for N-deacetylaseN-sulfotransferase 4, complete cds
10199	22694	35687	0.61	7.0E-70	AB036428.1	NT	Homo sapiens NDST4 mRNA for N-deacetylaseN-sulfotransferase 4, complete cds
10953	23468	36492	1.59	7.0E-70	11429985	NT	Homo sapiens spastic paraplegia 4 (autosomal dominant; spastin) (SPG4), mRNA
10953	23468	36493	1.59	7.0E-70	11429985	NT	Homo sapiens spastic paraplegia 4 (autosomal dominant; spastin) (SPG4), mRNA

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11488	23918	36986	2.2	7.0E-70	11526319	NT	Homo sapiens HIR (histone cell cycle regulation defective, S. cerevisiae) homolog A (HIRA), mRNA
11488	23918	36987	2.2	7.0E-70	11526319	NT	Homo sapiens HIR (histone cell cycle regulation defective, S. cerevisiae) homolog A (HIRA), mRNA
904	13518	26036	2	6.0E-70	4502166	NT	Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA
2182	14758	27328	1.02	6.0E-70	M30938.1	NT	Human Ku (p70/p80) subunit mRNA, complete cds
2551	15115	27885	1.42	6.0E-70	8923899	NT	Homo sapiens CMP-N-acetylneuraminic acid synthase (LOC55907), mRNA
2588	15470	27715	1.68	5.0E-70	7662307	NT	Homo sapiens KIAA0792 gene product (KIAA0792), mRNA
2588	15470	27716	1.68	5.0E-70	7662307	NT	Homo sapiens KIAA0792 gene product (KIAA0792), mRNA
11756	24151		3.79	5.0E-70	BE166034.1	EST_HUMAN	MR3-HT0487-150200-115-a08 HT0487 Homo sapiens cDNA
6851	19440	32255	153.56	4.0E-70	T06037.1	EST_HUMAN	EST03926 Fetal brain, Stragene (cat#936206) Homo sapiens cDNA clone HFBDN25
6887	19622	32456	0.79	4.0E-70	AW793226.1	EST_HUMAN	CM4-UM0003-010300-105-g08 UM0003 Homo sapiens cDNA
6887	19622	32457	0.79	4.0E-70	AW793226.1	EST_HUMAN	CM4-UM0003-010300-105-g08 UM0003 Homo sapiens cDNA
1633	14225	26756	1.19	3.0E-70	BE071796.1	EST_HUMAN	RC0-BT0522-071299-011-a12 BT0522 Homo sapiens cDNA
1633	14225	26757	1.19	3.0E-70	BE071796.1	EST_HUMAN	RC0-BT0522-071299-011-a12 BT0522 Homo sapiens cDNA
6100	18716	31467	0.9	3.0E-70	A1831975.1	EST_HUMAN	wh9d03.x1 NCI_CGAP_QLL1 Homo sapiens cDNA clone IMAGE:2388005.3
6511	19111	31897	2.36	3.0E-70	BF885233.1	EST_HUMAN	602141561F1 NIH_MGC_46 Homo sapiens cDNA clone IMAGE:4302808.5
6511	19111	31898	2.36	3.0E-70	BF885233.1	EST_HUMAN	602141561F1 NIH_MGC_46 Homo sapiens cDNA clone IMAGE:4302808.5
41	12720	25181	0.89	2.0E-70	AF012872.1	NT	Homo sapiens phosphatidylinositol 4-kinase 230 (p14K230) mRNA, complete cds
718	13339	25826	11.56	2.0E-70	N42161.1	EST_HUMAN	yy07a10.r1 Soares melanocyte 2NbhM Homo sapiens cDNA clone IMAGE:270522.5 similar to SW:D3HI_RAT P29266 3-HYDROXYISOBUTYRATE DEHYDROGENASE PRECURSOR ;
718	13339	25827	11.56	2.0E-70	N42161.1	EST_HUMAN	yy07a10.r1 Soares melanocyte 2NbhM Homo sapiens cDNA clone IMAGE:270522.5 similar to SW:D3HI_RAT P29266 3-HYDROXYISOBUTYRATE DEHYDROGENASE PRECURSOR ;
734	13354	25950	3.41	2.0E-70	A1246899.1	EST_HUMAN	qx51h01.x1 NCI_CGAP_Pent1 Homo sapiens cDNA clone IMAGE:2004913.3
1059	13664	26175	1.89	2.0E-70	8923689	NT	Homo sapiens hypothetical protein FLJ20758 (FLJ20758), mRNA
1226	13825	26340	1.29	2.0E-70	7661983	NT	Homo sapiens KIAA0193 gene product (KIAA0193), mRNA
1226	13825	26341	1.29	2.0E-70	7661983	NT	Homo sapiens KIAA0193 gene product (KIAA0193), mRNA
1778	14368	26912	1.48	2.0E-70	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
2359	14930		4.22	2.0E-70	AA054010.1	EST_HUMAN	z48g04.r1 Soares retina N2b4HR Homo sapiens cDNA clone IMAGE:380214.5 similar to SW:GAG_HTL1A
3688	16289	28758	2.21	2.0E-70	H37988.1	EST_HUMAN	P03345 GAG POLYPROTEIN ;
3891	16490	28950	0.8	2.0E-70	AL133207.2	NT	yp58b04.r1 Soares fetal liver spleen 1NfLS Homo sapiens cDNA clone IMAGE:191599.5
4123	16716	29172	5.05	2.0E-70	M69181.1	NT	Novel human gene mapping to chromosome X Human nonmuscle myosin heavy chain-B (MYH10) mRNA, partial cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5706	18332	30836	8.49	2.0E-70	X72662.1	NT	H. sapiens gene for schwannomin (CS8)
5706	18332	30837	8.49	2.0E-70	X72662.1	NT	H. sapiens gene for schwannomin (CS8)
6351	18956	31735	1.22	2.0E-70	AF310105.1	NT	Homo sapiens NALP1 mRNA, complete cds
6745	19338	32144	1.97	2.0E-70	D12825.1	NT	Human mRNA for NF1 protein isoform (neurofibromin isoform), complete cds
6773	19365	32176	9.77	2.0E-70	AF123074.1	NT	Homo sapiens cytoplasmic dynein intermediate chain 1 mRNA, complete cds
6773	19365	32177	9.77	2.0E-70	AF123074.1	NT	Homo sapiens cytoplasmic dynein intermediate chain 1 mRNA, complete cds
7070	18089	30446	1.64	2.0E-70	11422642	NT	Homo sapiens sialyltransferase 6 (N-acetylglucosaminide alpha 2,3-sialyltransferase) (SIAT6), mRNA
7434	18958	32823	0.84	2.0E-70	AF288207.1	NT	Homo sapiens cysteinyl-RNA synthetase mRNA, complete cds, alternatively spliced
7856	20401	33307	6.42	2.0E-70	M21741.1	NT	Human guanine nucleotide-binding protein alpha-subunit gene (G-s-alpha), exons 4 and 5
8164	20705	33621	0.75	2.0E-70	11423599	NT	Homo sapiens amylo-1,6-glucosidase, 4-alpha-glucanotransferase (glycogen debranching enzyme, glycogen storage disease type III) (AGL), mRNA
8594	21133		0.8	2.0E-70	H47959.1	EST_HUMAN	yp79g02.r1 Soares fetal liver spleen INFLS Homo sapiens cDNA clone IMAGE:193682 5'
9096	21632	34571	0.97	2.0E-70	11526355	NT	Homo sapiens dynein p62 subunit (LOC51164), mRNA
10044	22539	35536	1.3	2.0E-70	AF123303.1	NT	Homo sapiens calcium-binding transporter mRNA, partial cds
10490	22884	35992	0.6	2.0E-70	AB033042.1	NT	Homo sapiens mRNA for KIAA1216 protein, partial cds
10950	23465	36487	3.48	2.0E-70	8923420	NT	Homo sapiens hypothetical protein FLJ20450 (FLJ20450), mRNA
10950	23465	36488	3.48	2.0E-70	8923420	NT	Homo sapiens hypothetical protein FLJ20450 (FLJ20450), mRNA
11497	23948	37016	7.73	2.0E-70	4503520	NT	Homo sapiens eukaryotic translation initiation factor 3, subunit 6 (48kD) (EIF3S6) mRNA
12157	24397	30976	2.52	2.0E-70	11430460	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
12157	24397	30977	2.52	2.0E-70	11430460	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
3440	18048		2.73	1.0E-70	4507476	NT	Homo sapiens transglutaminase 3 (E polypeptide, protein-glutamine-gamma-glutamyltransferase) (TGM3) mRNA
9204	21721		0.64	1.0E-70	W85795.1	EST_HUMAN	zh55g05.r1 Soares fetal liver spleen INFLS_S1 Homo sapiens cDNA clone IMAGE:416024 5'
9714	22212		0.81	1.0E-70	AA442292.1	EST_HUMAN	zv54c03.r1 Soares testis NHT Homo sapiens cDNA clone IMAGE:757444 5'
10814	23335	36348	15.93	1.0E-70	AV738538.1	EST_HUMAN	AV738538 OB Homo sapiens cDNA clone CBLGB10 5'
6099	18715	31465	9.2	9.0E-71	A1143870.1	EST_HUMAN	q604f01.x1 Soares testis NHT Homo sapiens cDNA clone IMAGE:1738009 3' similar to TR:O14045
6099	18715	31466	9.2	9.0E-71	A1143870.1	EST_HUMAN	q604f01.x1 Soares testis NHT Homo sapiens cDNA clone IMAGE:1738009 3' similar to TR:O14045
7098	19689	32508	1.82	9.0E-71	A1654903.1	EST_HUMAN	w652c05.x1 NC1 CGAP_G06 Homo sapiens cDNA clone IMAGE:2308288 3' similar to TR:P97213 P97213 CDU2, CDU1, TCDD, TCDB, TCDE, TCDA, TCDC, CDD1, CDD2, CDD3, AND CDD4 GENES. ;
11389	19689	32508	5.11	9.0E-71	A1654903.1	EST_HUMAN	w652c05.x1 NC1 CGAP_G06 Homo sapiens cDNA clone IMAGE:2308288 3' similar to TR:P97213 P97213 CDU2, CDU1, TCDD, TCDB, TCDE, TCDA, TCDC, CDD1, CDD2, CDD3, AND CDD4 GENES. ;

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9000	21537		3.85	8.0E-71	AA171451.1	EST_HUMAN	z221d11.r1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone IMAGE:610101 5' similar to
7410	19935	32800	7.39	7.0E-71	AA442230.1	EST_HUMAN	TR:G1143061 G1143061 STRAIN XA34 POL ;
8612	21151	34085	1.34	7.0E-71	AA705457.1	EST_HUMAN	z60h06.r1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:758075 5'
11211	23714	36769	5.33	7.0E-71	AL163210.2	NT	z91a06.s1 Soares fetal_liver spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:462226 3'
2251	14825	27401	7.82	5.0E-71	AF056322.1	NT	Homo sapiens chromosome 21 segment HS21C010
4197	16787	29238	1.17	5.0E-71	AW816405.1	EST_HUMAN	Homo sapiens SP100-HMG nuclear autoantigen (SP100) mRNA, complete cds
6041	18660	31399	1.72	5.0E-71	4502740	NT	QV4-ST0234-181199-037-005 ST0234 Homo sapiens cDNA
6768	19361	32170	1.8	5.0E-71	11641408	NT	Homo sapiens cyclin-dependent kinase 6 (CDK6) mRNA
7000	19498	32318	0.8	5.0E-71	7682209	NT	Homo sapiens keratin, hair, acidic, 7 (KRT47), mRNA
7200	19731	32583	0.67	5.0E-71	11431590	NT	Homo sapiens KIAA0623 gene product (KIAA0623), mRNA
7520	20040	32903	2.64	5.0E-71	M638106.1	NT	Homo sapiens protein kinase C, beta 1 (PRKCB1), mRNA
7693	20202	33089	0.72	5.0E-71	11526445	NT	Human neurofibromatosis protein type 1 mRNA, 3' end of cds
7716	20224	33113	20.65	5.0E-71	AF072810.1	NT	Homo sapiens MAGUK protein p55T; Protein Associated with Lins 2 (LOC51678), mRNA
8460	21000	33916	0.69	5.0E-71	5453777	NT	Homo sapiens transcription factor WSTF mRNA, complete cds
8460	21000	33917	0.69	5.0E-71	5453777	NT	Homo sapiens nuclear factor related to kappa B binding protein (NFRKB) mRNA
9825	22323		2.26	5.0E-71	X13467.1	NT	Homo sapiens nuclear factor related to kappa B binding protein (NFRKB) mRNA
10513	23051	36062	1.57	5.0E-71	5726800	NT	Human PrA4 gene for Alzheimer's disease A4 amyloid protein precursor (exon 2)
10859	23380	36399	4.63	5.0E-71	11436514	NT	Homo sapiens IGF-II mRNA-binding protein 3 (KOC1), mRNA
11071	23583	36624	2.24	5.0E-71	11438069	NT	Homo sapiens pro-platelet basic protein (includes platelet basic protein, beta-thromboglobulin, connective tissue-activating peptide III, neutrophil-activating peptide-2) (PPBP), mRNA
11706	24119	37152	1.76	5.0E-71	11417862	NT	Homo sapiens similar to hypothetical protein FLJ20163 (H. sapiens) (LOC63325), mRNA
108	12784	25287	1.08	4.0E-71	4507592	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
372	13021	25506	116.83	4.0E-71	AF157626.1	NT	Homo sapiens tumor necrosis factor (ligand) superfamily, member 10 (TNFSF10) mRNA
372	13021	25507	116.83	4.0E-71	AF157626.1	NT	Equus caballus glyceraldehyde-3-phosphate dehydrogenase mRNA, partial cds
2911	15528	27998	3.25	4.0E-71	4505880	NT	Equus caballus glyceraldehyde-3-phosphate dehydrogenase mRNA, partial cds
4519	17103	29549	5.18	4.0E-71	AF056322.1	NT	Homo sapiens plasminogen (PLG) mRNA
5123	17695	30132	6.54	4.0E-71	7657802	NT	Homo sapiens SP100-HMG nuclear autoantigen (SP100) mRNA, complete cds
7977	20519		1.23	3.0E-71	AU135734.1	EST_HUMAN	Homo sapiens putative heme-binding protein (SOUL), mRNA
10572	23107	36121	4.09	3.0E-71	AA557683.1	EST_HUMAN	AU135734 PLACE1 Homo sapiens cDNA clone PLACE1002775 5'
1273	13969	26389	6.26	2.0E-71	AL163206.2	NT	nl45h10.s1 NCI_CGAP_P4 Homo sapiens cDNA clone IMAGE:1043683 similar to contains PTR5.13 PTR5 repetitive element ;
5523	18155	30570	6.94	2.0E-71	DB7482.1	NT	Homo sapiens chromosome 21 segment HS21C006
5523	18155	30571	6.94	2.0E-71	DB7482.1	NT	Human mRNA for KIAA0272 gene, partial cds
						NT	Human mRNA for KIAA0272 gene, partial cds

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10478	22872	35979	2.97	2.0E-71	AF095703.1	NT	Homo sapiens short chain L-3-hydroxyacyl-CoA dehydrogenase precursor (HADHSC) gene, nuclear gene encoding mitochondrial protein, complete cds
10478	22872	35980	2.97	2.0E-71	AF095703.1	NT	Homo sapiens short chain L-3-hydroxyacyl-CoA dehydrogenase precursor (HADHSC) gene, nuclear gene encoding mitochondrial protein, complete cds
10574	23109	36122	3.75	2.0E-71	BE018477.1	EST_HUMAN	bb81a06.y1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3048754 5' similar to SW:R23B_HUMAN P64727 UV EXCISION REPAIR PROTEIN PROTEIN RAD23 HOMOLOG B :
11454	23904	36971	1.98	2.0E-71	R55626.1	EST_HUMAN	y77c11.r1 Soares breast 2NdbHBst Homo sapiens cDNA clone IMAGE:154772 5'
11825	24183		10.18	2.0E-71	T95489.1	EST_HUMAN	ye43q09.r1 Soares fetal liver spleen 1NfLS Homo sapiens cDNA clone IMAGE:120520 5'
668	13280	25771	1.4	1.0E-71	A077927.1	EST_HUMAN	oy15e03.s1 Soares, senescent, fibroblasts, NBHSF Homo sapiens cDNA clone IMAGE:1665916 3' similar to contains LOR1.b2 LOR1 repetitive element :
977	13589	26104	2.23	1.0E-71	7706281	NT	Homo sapiens neuronal cell death-related protein (LOC51616), mRNA
1139	13742	26251	4.37	1.0E-71	AF205880.1	NT	Homo sapiens disabled-2 gene, exons 2 through 15 and complete cds
1385	13979	26506	10.24	1.0E-71	AF012872.1	NT	Homo sapiens phosphatidylinositol 4-kinase 230 (p4K230) mRNA, complete cds
2129	14707	27278	1.38	1.0E-71	AB017007.1	NT	Homo sapiens PMS2L16 mRNA, partial cds
2129	14707	27279	1.38	1.0E-71	AB017007.1	NT	Homo sapiens PMS2L16 mRNA, partial cds
2717	15274	27840	3.73	1.0E-71	7657153	NT	Homo sapiens hairy/enhancer-of-split related with YRPW motif-like (HEYL), mRNA
3549	16153	28635	1.24	1.0E-71	AF119665.1	NT	Homo sapiens inorganic pyrophosphatase mRNA, complete cds
3656	16259	28730	6.17	1.0E-71	AF248219.1	NT	Homo sapiens SNARE protein kinase SNAK mRNA, complete cds
3656	16259	28731	6.17	1.0E-71	AF248219.1	NT	Homo sapiens SNARE protein kinase SNAK mRNA, complete cds
3710	16311	28778	0.95	1.0E-71	BE122850.1	EST_HUMAN	02_15 Human Epidermal Keratinocyte Subtraction Library- Upregulated Transcripts Homo sapiens cDNA clone 02_15 5' similar to Homo sapiens chromosome 19
3710	16311	28779	0.95	1.0E-71	BE122850.1	EST_HUMAN	02_15 Human Epidermal Keratinocyte Subtraction Library- Upregulated Transcripts Homo sapiens cDNA clone 02_15 5' similar to Homo sapiens chromosome 19
3804	16404	28868	2.11	1.0E-71	AF218904.1	NT	Homo sapiens attractin precursor (A.TRN) gene, exon 19
4569	17152	29598	2.19	1.0E-71	D28476.1	NT	Human mRNA for KIAA0045 gene, complete cds
4695	17277	29723	0.61	1.0E-71	H23176.1	EST_HUMAN	ym58h10.r1 Soares infant brain 1NIB Homo sapiens cDNA clone IMAGE:52528 5'
6840	19430	32246	1.54	1.0E-71	11426182	NT	Homo sapiens GCN5 (general control of amino-acid synthesis, yeast, homolog)-like 2 (GCN5L2), mRNA
7144	19677	32517	1.33	1.0E-71	AB011131.1	NT	Homo sapiens mRNA for KIAA0559 protein, partial cds
7352	19878	32743	11.94	1.0E-71	U80753.1	NT	Homo sapiens CAGL79 mRNA, partial cds
8089	20630	33543	0.87	1.0E-71	AF105267.1	NT	Homo sapiens glycican-6 (GPC6) mRNA, complete cds
8110	20651	33559	2.11	1.0E-71	11425430	NT	Homo sapiens myomesin (M-protein) 2 (165K) (MYOM2), mRNA
8383	20923	33842	3.93	1.0E-71	8922811	NT	Homo sapiens hypothetical protein FLJ10998 (FLJ10998), mRNA
8383	20923	33843	3.93	1.0E-71	8922811	NT	Homo sapiens hypothetical protein FLJ10998 (FLJ10998), mRNA

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Table 4
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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9155	21690	34634	0.97	1.0E-71	S72393.1	NT	CSNK2A1=casein kinase II (CKII) subunit alpha [human, Genomic, 18862 nt]
9920	22416	35391	7.06	1.0E-71	AY007643.1	NT	Homo sapiens cytochrome c oxidase subunit VIIa-related protein gene, complete cds
9880	22475		4.9	1.0E-71	AV761217.1	EST_HUMAN	AV761217 MDS Homo sapiens cDNA clone MDSEIA03 5'
10431	22925	35931	1.57	1.0E-71	11433142	NT	Homo sapiens activated leucocyte cell adhesion molecule (ALCAM), mRNA
10663	23195		6.4	1.0E-71	AV761217.1	EST_HUMAN	AV761217 MDS Homo sapiens cDNA clone MDSEIA03 5'
10762	23286	36298	2.09	1.0E-71	11418903	NT	Homo sapiens coagulation factor XIII, A1 polypeptide (F13A1), mRNA
11025	23539	36574	1.82	1.0E-71	11417191	NT	Homo sapiens leucyl/cystinyl aminopeptidase (LNPEP), mRNA
11025	23539	36575	1.82	1.0E-71	11417191	NT	Homo sapiens leucyl/cystinyl aminopeptidase (LNPEP), mRNA
12208	24432		15.2	1.0E-71	AB011399.1	NT	Homo sapiens gene for AF-6, complete cds
432	13065	25559	1.33	9.0E-72	A1857635.1	EST_HUMAN	wk95g03.x1 NC1_CGAP_Lu19 Homo sapiens cDNA clone IMAGE:2423188 3' similar to TR:O86705 O86705
432	13065	25560	1.33	9.0E-72	A1857635.1	EST_HUMAN	HYPOTHETICAL 38.6 KD PROTEIN, contains Alu repetitive element;
6259	18968	31638	0.87	8.0E-72	BF035752.1	EST_HUMAN	wk95g03.x1 NC1_CGAP_Lu19 Homo sapiens cDNA clone IMAGE:2423188 3' similar to TR:O86705 O86705
10990	23504	36533	2.04	8.0E-72	11424480	NT	HYPOTHETICAL 38.6 KD PROTEIN, contains Alu repetitive element;
10990	23504	36534	2.04	8.0E-72	11424480	NT	601458747F1 NIH MGC 66 Homo sapiens cDNA clone IMAGE:3862451 5'
10990	23504	36535	2.04	8.0E-72	11424480	NT	Homo sapiens nuclear RNA helicase, DECD variant of DEAD box family (DDXL), mRNA
							Homo sapiens nuclear RNA helicase, DECD variant of DEAD box family (DDXL), mRNA
							Homo sapiens nuclear RNA helicase, DECD variant of DEAD box family (DDXL), mRNA
4190	16779	29225	1.48	7.0E-72	4501866	NT	Homo sapiens aconitase 2, mitochondrial (ACO2), nuclear gene encoding mitochondrial protein, mRNA
4190	16779	29226	1.48	7.0E-72	4501866	NT	Homo sapiens aconitase 2, mitochondrial (ACO2), nuclear gene encoding mitochondrial protein, mRNA
4190	16779	29227	1.48	7.0E-72	4501866	NT	Homo sapiens aconitase 2, mitochondrial (ACO2), nuclear gene encoding mitochondrial protein, mRNA
7178	19710	32568	3.23	7.0E-72	S41694.1	NT	(pseudogene) PTMAP2=prothymosin alpha [human, Genomic, 1192 nt, segment 2 of 3]
12339	24521		1.9	7.0E-72	F28259.1	EST_HUMAN	HSPD13670 HK3 Homo sapiens cDNA clone s4000051G02
8324	20865		4.31	6.0E-72	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
67	12746	25223	1.56	5.0E-72	BF333707.1	EST_HUMAN	QV0-CS0010-150900-398-e11 CS0010 Homo sapiens cDNA
67	12746	25224	1.56	5.0E-72	BF333707.1	EST_HUMAN	QV0-CS0010-150900-398-e11 CS0010 Homo sapiens cDNA
68	12746	25223	10.23	5.0E-72	BF333707.1	EST_HUMAN	QV0-CS0010-150900-398-e11 CS0010 Homo sapiens cDNA
68	12746	25224	10.23	5.0E-72	BF333707.1	EST_HUMAN	QV0-CS0010-150900-398-e11 CS0010 Homo sapiens cDNA
1178	13780		2.72	5.0E-72	L11645.1	NT	Homo sapiens alpha-tubulin mRNA, complete cds
7030	19564	32391	1.36	5.0E-72	AU128584.1	EST_HUMAN	AU128584 NT2RP2 Homo sapiens cDNA clone NT2RP2003751 5'

Table 4

Single Exon Probes Expressed In Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8711	21250	34173	3.16	5.0E-72	AW161274.1	EST_HUMAN	au80c03.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2782564 5' similar to
9871	22368	35346	0.92	5.0E-72	AV724632.1	EST_HUMAN	TR:Q98785 Q98785 HYPOTHETICAL 32.4 KD PROTEIN contains element MSR1 repetitive element ;
11122	23630	36672	3.44	5.0E-72	BF331571.1	EST_HUMAN	AV724632 HTB Homo sapiens cDNA clone HTBAKB01 5'
11122	23630	36673	3.44	5.0E-72	BF331571.1	EST_HUMAN	MR4-BT0598-010600-005-d05 BT0598 Homo sapiens cDNA
11500	23849	37018	1.62	5.0E-72	BE208545.1	EST_HUMAN	ba08g08.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823806 5'
11500	23849	37019	1.62	5.0E-72	BE208545.1	EST_HUMAN	ba08g08.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823806 5'
11895	25047		2.88	5.0E-72	BE928645.1	EST_HUMAN	QV1-BT0632-280800-342-a10 BT0632 Homo sapiens cDNA
4948	17523		1.21	4.0E-72	11034844	NT	Homo sapiens hypothetical protein dJ1057820.2 (DJ1057820.2), mRNA
5422	17878	30387	1.05	4.0E-72	AB033104.1	NT	Homo sapiens mRNA for KIAA1278 protein, partial cds
5656	18283	30761	0.72	4.0E-72	AF170025.1	NT	Homo sapiens zinc finger protein ZFP-85 (ZFP85) mRNA, alternatively spliced, complete cds
6674	19270	32075	0.81	4.0E-72	T87947.1	EST_HUMAN	y493a01.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:115752 5' similar to
7439	19963	32829	3.01	4.0E-72	5729867	NT	SP:A44282 A44282 RETROVIRUS-RELATED POLYPROTEIN - HUMAN ;
9699	22198	35171	1.64	4.0E-72	8923669	NT	Homo sapiens hec domain and RLD 2 (HERC2), mRNA
							Homo sapiens hypothetical protein FLJ20758 (FLJ20758), mRNA
10318	22812	35807	0.98	4.0E-72	AI248796.1	EST_HUMAN	qh67c02.x1 Soares fetal liver spleen 1NFLS_S1 Homo sapiens cDNA clone IMAGE:1849730 3' similar to
11402	23853	36918	7.8	4.0E-72	H79421.1	EST_HUMAN	TR:Q14498 Q14498 SPLICING FACTOR, (1): contains Alu repetitive element, contains element L1 repetitive element ;
11528	23976	37046	2.48	4.0E-72	T81910.1	EST_HUMAN	yu28a03.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:235084 5'
12263	24473	30833	4.5	4.0E-72	AJ277546.2	NT	y428d08.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:109649 3'
22	12701	25157	3.55	3.0E-72	5031876	NT	Homo sapiens WEE1 gene for protein kinase and partial ZNF143 gene for zinc finger transcription factor
936	13649		1.46	3.0E-72	AA723823.1	EST_HUMAN	Homo sapiens pre-B-cell colony-enhancing factor (PBEF) mRNA
							ah63a08.s1 Soares testis NHT Homo sapiens cDNA clone 1310280 3'
1198	13797	28307	7.76	3.0E-72	U16306.1	NT	Human chondroitin sulfate proteoglycan versican V0 splice-variant precursor peptide mRNA, complete cds
1198	13797	28308	7.76	3.0E-72	U16306.1	NT	Human chondroitin sulfate proteoglycan versican V0 splice-variant precursor peptide mRNA, complete cds
1235	13834	26348	1.33	3.0E-72	U80226.1	NT	Human gamma-aminobutyric acid transaminase mRNA, partial cds
1235	13834	26349	1.33	3.0E-72	U80226.1	NT	Human gamma-aminobutyric acid transaminase mRNA, partial cds
1567	14159	26690	0.98	3.0E-72	BE242161.1	EST_HUMAN	TCAAAP1E1252 Pediatric acute myelogenous leukemia cell (FAB M1) Baylor-HGSC project=TCAA Homo sapiens cDNA clone TCAAAP1252
3110	15725	28198	13.29	3.0E-72	AJ228043.1	NT	Homo sapiens 959 kb contig between AML1 and CBR1 on chromosome 21q22, segment 3/3

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3317	15927	28404	2.84	3.0E-72	8923548	NT	Homo sapiens hypothetical protein FLJ20585 (FLJ20585), mRNA
3895	16494	28955	2.71	3.0E-72	S77589.1	NT	TCR V delta 2-C alpha =T-cell receptor delta and C alpha fusion gene (alternatively spliced, splice junction)
4509	17093	29540	0.94	3.0E-72	AF143892.1	NT	(human, precursor B-cell line REH, mRNA Partial, 211 nt)
4509	17093	29541	0.94	3.0E-72	AF143892.1	NT	Homo sapiens thioredoxin-like protein (TXNL) gene, exon 3
4643	17225	29679	2.89	3.0E-72	11416196	NT	Homo sapiens thioredoxin-like protein (TXNL) gene, exon 3
5711	18337		1.07	3.0E-72	4759093	NT	Homo sapiens hypothetical protein (FLJ11127), mRNA
6134	18748	31504	1.98	3.0E-72	AF073387.1	NT	Homo sapiens semaphorin W (SEMAW) mRNA
6134	18748	31505	1.98	3.0E-72	AF073387.1	NT	Homo sapiens growth factor receptor-bound protein 10 (GRB10) gene, exon 5
6314	18921	31697	4.49	3.0E-72	AB023004.1	NT	Homo sapiens growth factor receptor-bound protein 10 (GRB10) gene, exon 5
6314	18921	31698	4.49	3.0E-72	AB023004.1	NT	Homo sapiens mRNA for KIAA1081 protein, partial cds
6726	19320	32125	3.59	3.0E-72	4826987	NT	Homo sapiens mRNA for KIAA1081 protein, partial cds
							Homo sapiens ribosomal protein L3-like (RPL3L) mRNA
7585	20100	32975	1.92	3.0E-72	U80017.1	NT	Homo sapiens basic transcription factor 2 p44 (btf2p44) gene, partial cds, neuronal apoptosis inhibitory protein (naip) and survival motor neuron protein (smn) genes, complete cds
8116	20657	33566	1.52	3.0E-72	5031892	NT	Homo sapiens nuclear receptor subfamily 1, group H, member 3 (NR1H3), mRNA
10328	22822	35818	1.67	3.0E-72	X98289.1	NT	Homo sapiens S100A12 gene for Calgranulin C, exon 2 and joined cds
12174	24413	30946	2.03	3.0E-72	AB011399.1	NT	Homo sapiens gene for AF-6, complete cds
							Homo sapiens solute carrier family 13 (sodium-dependent dicarboxylate transporter), member 2 (SLC13A2), mRNA
6113	18729	31482	1.41	2.0E-72	11426671	NT	601890419F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4131461 5'
9025	21582	34490	0.78	2.0E-72	BF308560.1	EST_HUMAN	601890419F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4131461 5'
9025	21582	34491	0.78	2.0E-72	BF308560.1	EST_HUMAN	601890419F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4131461 5'
10619	23151	36163	2.52	2.0E-72	AA789277.1	EST_HUMAN	aj28009.s1 Soares_testis_NHT Homo sapiens cDNA clone 1391608 3' similar to gb:X02067 H.sapiens mRNA for 7SL RNA pseudogene (HUMAN);
12260	24470	30930	4.78	2.0E-72	AF182714.1	NT	Rattus norvegicus putative phosphate/phosphoenolpyruvate translocator mRNA, complete cds
2120	14698	27267	1.03	1.0E-72	AA846225.1	EST_HUMAN	ai83d02.s1 Soares_parathyroid_tumor_NbHPA Homo sapiens cDNA clone IMAGE:1387395 3'
5940	18560	31289	4.04	1.0E-72	7637876	NT	Homo sapiens vacuolar protein sorting 41 (yeast homolog) (VPS41), mRNA
6676	19272	32076	1.18	1.0E-72	11321578	NT	Homo sapiens myosin, heavy polypeptide 13, skeletal muscle (MYH13), mRNA
6676	19272	32077	1.18	1.0E-72	11321578	NT	Homo sapiens myosin, heavy polypeptide 13, skeletal muscle (MYH13), mRNA
6744	24768	32143	1.3	1.0E-72	AF751818.1	EST_HUMAN	AV751818 NPD Homo sapiens cDNA clone NPDAIE11 5'
7633	20145	33026	3.81	1.0E-72	BE175434.1	EST_HUMAN	RC4-HT0578-170300-012-g02 HT0578 Homo sapiens cDNA
7633	20145	33027	3.81	1.0E-72	BE175434.1	EST_HUMAN	RC4-HT0578-170300-012-g02 HT0578 Homo sapiens cDNA
9510	22010	34968	7.2	1.0E-72	AF222742.1	NT	Homo sapiens synaptic glycoprotein SC2 (SC2) mRNA, complete cds
9510	22010	34969	7.2	1.0E-72	AF222742.1	NT	Homo sapiens synaptic glycoprotein SC2 (SC2) mRNA, complete cds
1508	14100	26637	1.28	9.0E-73	AW374668.1	EST_HUMAN	MR0-C10063-071099-002-h11 CT0063 Homo sapiens cDNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6190	18800	31570	0.98	9.0E-73	11525883	NT	Homo sapiens membrane protein, palmitoylated 3 (MAGUK p55 subfamily member 3) (MPP3), mRNA
10829	23350		27.89	9.0E-73	11424098	NT	Homo sapiens ribosomal protein L13a (RPL13A), mRNA
1076	13680	26190	1.62	8.0E-73	AW071755.1	EST_HUMAN	ws55c08.x1 NCI CGAP Bim25 Homo sapiens cDNA clone IMAGE:2501098 3' similar to TR:Q69050
3332	15942	28417	0.61	8.0E-73	11435180	NT	Homo sapiens geophyrin (GPH), mRNA
5768	18394	31108	0.76	8.0E-73	4505788	NT	Homo sapiens phosphatidylinositol 3-kinase, class 2, alpha polypeptide (PIK3C2A), mRNA
6887	19283	32086	4.21	8.0E-73	11426469	NT	Homo sapiens lysosomal enzyme homolog (LOC57151), mRNA
8039	20581	33488	2.58	8.0E-73	AF113129.1	NT	Homo sapiens vacuolar ATPase isoform VA68 mRNA, complete cds
9275	21801	34751	5.4	8.0E-73	BE019900.1	EST_HUMAN	bb62a06.y1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3030034 5' similar to gb:X04088_cds1 ACTIN, CYTOPLASMIC 2 (HUMAN), gb:M21495 Mouse cytoskeletal gamma-actin mRNA, complete cds (MOUSE);
9855	22154	35123	1.83	8.0E-73	11526037	NT	Homo sapiens interleukin 12 receptor, beta 1 (IL12RB1), mRNA
9855	22154	35124	1.83	8.0E-73	11526037	NT	Homo sapiens interleukin 12 receptor, beta 1 (IL12RB1), mRNA
12324	24511	30919	7.07	8.0E-73	11418189	NT	Homo sapiens thyroid autoantigen 70kD (Ku antigen) (G22P1), mRNA
1173	13775	26285	1.37	7.0E-73	8923280	NT	Homo sapiens hypothetical protein FLJ20309 (FLJ20309), mRNA
3340	15950	28426	1.27	7.0E-73	AL163206.2	NT	Homo sapiens chromosome 21 segment HS21C006
4268	16884	29329	2.59	7.0E-73	AF019413.1	NT	Homo sapiens HLA class III region containing tenascin X (tenascin-X) gene, partial cds; cytochrome P450 21-hydroxylase (CYP21B), complement component C4 (C4B) G11, helicase (SK12W), RD, complement factor B (BF), and complement component C2 (C2) genes;>
5079	17652		1.64	7.0E-73	AL163282.2	NT	Homo sapiens chromosome 21 segment HS21C082
169	12832		2.14	6.0E-73	AL163218.2	NT	Homo sapiens chromosome 21 segment HS21C078
7224	19755	32610	3.52	6.0E-73	BE166574.1	EST_HUMAN	QV0-HT0494-020300-137-403 HT0494 Homo sapiens cDNA
5460	18095	30413	1.78	4.0E-73	11422159	NT	Homo sapiens HELG protein (FAM4A1), mRNA
1902	14487	27048	1.78	3.0E-73	11435913	NT	Homo sapiens heme-binding protein (HEBP), mRNA
1902	14487	27049	1.78	3.0E-73	11435913	NT	Homo sapiens heme-binding protein (HEBP), mRNA
8799	19390	32205	1.03	3.0E-73	AA136403.1	EST_HUMAN	zn95604.s1 Strategene fetal retina 937202 Homo sapiens cDNA clone IMAGE:565950 3' similar to gb:Z23064_cds1 HETEROGENEOUS NUCLEAR RIBONUCLEOPROTEIN G (HUMAN);
8893	21232	34152	0.63	3.0E-73	AV729428.1	EST_HUMAN	AV729428 HTC Homo sapiens cDNA clone HTCAAF071 5'
8893	21232	34153	0.63	3.0E-73	AV729428.1	EST_HUMAN	AV729428 HTC Homo sapiens cDNA clone HTCAAF071 5'
11478	23928		1.58	3.0E-73	A1004040.1	EST_HUMAN	ou11d02.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1625955 3'
12578	24675		1.34	3.0E-73	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
12583	24677		1.67	3.0E-73	AW898081.1	EST_HUMAN	RC3-NN0066-270400-011-c04 NN0066 Homo sapiens cDNA
884	13488	26016	2.4	2.0E-73	AF138897.1	NT	Homo sapiens BASS1 (BASS1) mRNA, partial cds

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1989	14571		2.46	2.0E-73	AW88081.1	EST_HUMAN	RC3-NN0066-270400-011-c04 NN0066 Homo sapiens cDNA
3215	15827	28305	2.05	2.0E-73	4502582	NT	Homo sapiens caspase 8, apoptosis-related cysteine protease (CASP8) mRNA
3604	16208	28686	0.88	2.0E-73	7669539	NT	Homo sapiens Parkinson disease (autosomal recessive, juvenile) 2, parkin (PARK2), transcript variant 3, mRNA
3604	16208	28687	0.88	2.0E-73	7669539	NT	Homo sapiens Parkinson disease (autosomal recessive, juvenile) 2, parkin (PARK2), transcript variant 3, mRNA
8507	18204	32011	6.35	2.0E-73	AB048811.1	NT	Homo sapiens mRNA for KIAA1591 protein, partial cds
8801	18382	32207	1.52	2.0E-73	11431471	NT	Homo sapiens interleukin 4 receptor (IL4R), mRNA
8801	18382	32208	1.52	2.0E-73	11431471	NT	Homo sapiens interleukin 4 receptor (IL4R), mRNA
9451	21977	34928	0.88	2.0E-73	AF198349.1	NT	Gallus gallus Dach2 protein (Dach2) mRNA, complete cds
9451	21977	34928	0.88	2.0E-73	AF198349.1	NT	Gallus gallus Dach2 protein (Dach2) mRNA, complete cds
10320	22814	35810	1.48	2.0E-73	4504168	NT	Homo sapiens glutathione synthetase (GSS) mRNA
10391	22885	35880	1.18	2.0E-73	11496980	NT	Homo sapiens supervillin (SVIL), transcript variant 1, mRNA
10391	22885	35881	1.18	2.0E-73	11496980	NT	Homo sapiens supervillin (SVIL), transcript variant 1, mRNA
10933	23451	36472	3.48	2.0E-73	4557612	NT	Homo sapiens galactosylceramidase (Krabbe disease) (GALC), mRNA
10933	23451	36473	3.48	2.0E-73	4557612	NT	Homo sapiens galactosylceramidase (Krabbe disease) (GALC), mRNA
10982	23477	36502	1.85	2.0E-73	AB028982.1	NT	Homo sapiens mRNA for KIAA1059 protein, partial cds
12096	14571		2.75	2.0E-73	AW88081.1	EST_HUMAN	RC3-NN0066-270400-011-c04 NN0066 Homo sapiens cDNA
12665	24735	30825	1.41	2.0E-73	AB029016.1	NT	Homo sapiens mRNA for KIAA1093 protein, partial cds
1818	14408	26953	1.74	1.0E-73	AU121585.1	EST_HUMAN	AU121585 MAMMA1 Homo sapiens cDNA clone MAMMA1000480 5'
2525	15089	27861	0.97	1.0E-73	AF198349.1	NT	Gallus gallus Dach2 protein (Dach2) mRNA, complete cds
6500	19100	31885	1.05	1.0E-73	BE151283.1	EST_HUMAN	CM1-HT0282-111199-042-h10 HT0282 Homo sapiens cDNA
9419	21928	34874	1.41	1.0E-73	AI147427.1	EST_HUMAN	gg61b07.r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1839637 5' similar to contains element MER22 repetitive element
11325	23023	36032	3.93	1.0E-73	BE385477.1	EST_HUMAN	601276071F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3617105 5'
770	13398	25868	2.42	8.0E-74	4557426	NT	Homo sapiens CD39-like 4 (CD39L4) mRNA
6073	18690	31435	1.87	8.0E-74	S83194.1	NT	Cac2/calmodulin-dependent protein kinase IV kinase isoform [rats, brain, mRNA, 3429 nt]
6073	18690	31436	1.87	8.0E-74	S83194.1	NT	Cac2/calmodulin-dependent protein kinase IV kinase isoform [rats, brain, mRNA, 3429 nt]
1992	14574	27133	3.28	7.0E-74	AJ001689.1	NT	Homo sapiens NKG2D gene, exon 10
3371	15978	28456	1.18	7.0E-74	AL163248.2	NT	Homo sapiens chromosome 21 segment HS21C046
9187	21744	34687	2.49	7.0E-74	BE967432.1	EST_HUMAN	801648284F1 NIH_MGC_73 Homo sapiens cDNA clone IMAGE:3832897 5'
12323	24510	30918	6.87	7.0E-74	BE286305.1	EST_HUMAN	801191927F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3535855 5'
1161	13764	28275	4.55	6.0E-74	AF109907.1	NT	Homo sapiens S164 gene, partial cds; PS1 and hypothetical protein genes, complete cds; and S171 gene, partial cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1668	14261	26794	0.9	6.0E-74	AW263177.1	EST_HUMAN	3078907.xt Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2700636 3'
2355	14928	27489	10.83	6.0E-74	BE388260.1	EST_HUMAN	601283521F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3605453 5'
2355	14928	27500	10.83	6.0E-74	BE388260.1	EST_HUMAN	601283521F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3605453 5'
2889	15508	27977	1.22	6.0E-74	AW014039.1	EST_HUMAN	U1-H810-aah-h-03-Q-U1.s1 NCL_CGAP_Sub1 Homo sapiens cDNA clone IMAGE:2709365 3'
2889	15508	27978	1.22	6.0E-74	AW014039.1	EST_HUMAN	U1-H810-aah-h-03-Q-U1.s1 NCL_CGAP_Sub1 Homo sapiens cDNA clone IMAGE:2709365 3'
3775	16375	28840	1.64	6.0E-74	BE048946.1	EST_HUMAN	tr54611.xt NCL_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3132332 3'
3775	16375	28841	1.64	6.0E-74	BE048946.1	EST_HUMAN	tr54611.xt NCL_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3132332 3'
5177	17744	30172	0.85	6.0E-74	4758135	NT	Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 11 (S. cerevisiae CHL1-like helicase) (DDX11) mRNA
5177	17744	30173	0.85	6.0E-74	4758135	NT	Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 11 (S. cerevisiae CHL1-like helicase) (DDX11) mRNA
5688	18199	30847	3.28	6.0E-74	11056013	NT	Homo sapiens actin filament associated protein (AFAP), mRNA
938	13551	26067	1.37	5.0E-74	AW020986.1	EST_HUMAN	df17c09.yt Morton Fetal Cochlea Homo sapiens cDNA clone IMAGE:2483704 5'
2728	15281	30682	4.42	5.0E-74	AW362786.1	EST_HUMAN	PMO-CTO289-271098-001-h07 CT0289 Homo sapiens cDNA
5603	18232	30682	1.98	5.0E-74	11425417	NT	Homo sapiens phosphatidylinositol glycan, class L (PIGL), mRNA
5981	18583	31317	11.6	5.0E-74	X89870.1	NT	H. sapiens mRNA for TPOR18 protein
6004	18824	31359	8.99	5.0E-74	4507866	NT	Homo sapiens VAMP (vesicle-associated membrane protein)-associated protein A (33kD) (VAPA) mRNA, and translated products
6067	18884	31426	2.33	5.0E-74	11431471	NT	Homo sapiens interleukin 4 receptor (IL4R), mRNA
6067	18884	31427	2.33	5.0E-74	11431471	NT	Homo sapiens interleukin 4 receptor (IL4R), mRNA
6978	19582	32377	3.35	5.0E-74	7662263	NT	Homo sapiens KIAA0716 gene product (KIAA0716), mRNA
7980	20522	33428	3.2	5.0E-74	11345483	NT	Homo sapiens hypothetical protein FLJ13222 (FLJ13222), mRNA
10614	23147	36158	1.96	5.0E-74	Y09420.1	NT	H. sapiens mRNA for HIP-1
10614	23147	36159	1.96	5.0E-74	Y09420.1	NT	H. sapiens mRNA for HIP-1
3071	12866	25446	2.66	4.0E-74	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
885	13499	26017	9.19	4.0E-74	AB028942.1	NT	Homo sapiens mRNA for KIAA1019 protein, partial cds
2005	14587	27146	2.26	4.0E-74	AB026898.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
2005	14587	27147	2.26	4.0E-74	AB026898.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
2117	14695	27263	2.03	4.0E-74	4506192	NT	Homo sapiens proteasome (prosome, macropain) subunit, beta type, 1 (PSMB1) mRNA
2117	14695	27264	2.03	4.0E-74	4506192	NT	Homo sapiens proteasome (prosome, macropain) subunit, beta type, 1 (PSMB1) mRNA
2178	14755	27325	1.21	4.0E-74	AB032994.1	NT	Homo sapiens mRNA for KIAA1168 protein, partial cds
2471	15038	27606	0.89	4.0E-74	AJ006976.1	NT	Homo sapiens PLP gene

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3127	15741	28210	4.58	4.0E-74	AJ008976.1	NT	Homo sapiens PLP gene
3580	18184	28668	1.14	4.0E-74	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
4138	18728	29181	1.01	4.0E-74	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047
4855	17237	29692	1.71	4.0E-74	7682183	NT	Homo sapiens KIAA0569 gene product (KIAA0569), mRNA
4720	17301	29746	0.79	4.0E-74	Z17227.1	NT	Homo sapiens mRNA for transmembrane receptor protein
5188	17737	30164	0.81	4.0E-74	AB040909.1	NT	Homo sapiens mRNA for KIAA1476 protein, partial cds
8488	21025		21.13	3.0E-74	AA300378.1	EST_HUMAN	EST13131 Thymus tumor III Homo sapiens cDNA 5' end similar to similar to ribosomal protein L37
8510	21049	33971	0.47	3.0E-74	9966912	NT	Homo sapiens actin-related protein 3-beta (ARP3BETA), mRNA
9294	21894	34841	2.47	3.0E-74	M78984.1	EST_HUMAN	EST01132 Subtracted Hippocampus, Stratagene (cat. #936205) Homo sapiens cDNA clone HHCPFF91
10241	22736	35728	2.42	3.0E-74	AA601493.1	EST_HUMAN	no17g05.s1 NCI_CGAP_Phe1 Homo sapiens cDNA clone IMAGE:1100984 3'
993	13605	28119	172.8	2.0E-74	7669491	NT	Homo sapiens glyceraldehyde-3-phosphate dehydrogenase (GAPD), mRNA
993	13605	26120	172.8	2.0E-74	7669491	NT	Homo sapiens glyceraldehyde-3-phosphate dehydrogenase (GAPD), mRNA
1217	13817	26332	0.92	2.0E-74	AF020092.1	NT	Human endogenous retrovirus HERV-K-T47D
1287	13882	26407	1.84	2.0E-74	AI950528.1	EST_HUMAN	wx51a07.x1 NCI_CGAP_Lu28 Homo sapiens cDNA clone IMAGE:2547204 3' similar to SW_GG95_HUMAN
1639	14231	26784	4.17	2.0E-74	4885198	NT	Q08379 GOLGIN-95, contains element MER22 repetitive element ; Homo sapiens epidermal growth factor receptor (avian erythroblastic leukemia viral (v-erb-b) oncogene homolog) (EGFR) mRNA
1639	14231	26785	4.17	2.0E-74	4885198	NT	Homo sapiens epidermal growth factor receptor (avian erythroblastic leukemia viral (v-erb-b) oncogene homolog) (EGFR) mRNA
5149	17719	30149	2.97	2.0E-74	AL355092.1	NT	Novel human gene mapping to chromosome 22
5149	17719	30150	2.97	2.0E-74	AL355092.1	NT	Novel human gene mapping to chromosome 22
5155	17725	30156	3.93	2.0E-74	J02963.1	NT	Human platelet glycoprotein IIb mRNA, 3' end
5866	24752	31322	1.72	2.0E-74	BE711134.1	EST_HUMAN	RC6-HT0678-220500-011-C03 HT0678 Homo sapiens cDNA
6055	24755	31412	2.03	2.0E-74	11439587	NT	Homo sapiens PDZ-73 protein (PDZ-73/NY-CO-38), mRNA
8055	24755	31413	2.03	2.0E-74	11439587	NT	Homo sapiens PDZ-73 protein (PDZ-73/NY-CO-38), mRNA
8120	24755	31412	2.72	2.0E-74	11439587	NT	Homo sapiens PDZ-73 protein (PDZ-73/NY-CO-38), mRNA
8120	24755	31413	2.72	2.0E-74	11439587	NT	Homo sapiens PDZ-73 protein (PDZ-73/NY-CO-38), mRNA
7160	19682	32538	1.3	2.0E-74	BF030788.1	EST_HUMAN	Homo sapiens PDZ-73 protein (PDZ-73/NY-CO-38), mRNA
7881	20423	33331	1.56	2.0E-74	AB037816.1	NT	601557524F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:3827549 5'
9304	21904	34853	7.76	2.0E-74	AL163204.2	NT	Homo sapiens mRNA for KIAA1395 protein, partial cds
12033	24323		3.9	2.0E-74	AA196181.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C004
12605	24689	30882	1.99	2.0E-74	BF666568.1	EST_HUMAN	zp96a06.s1 Stratagene muscle 937209 Homo sapiens cDNA clone IMAGE:628018 3'
57	12737	25207	2.04	1.0E-74	7657334	NT	60212128F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4278559 5' Homo sapiens Missipen/NIK-related kinase (MINK), mRNA

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Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
359	13008	25491	4.11	1.0E-74	AW816405.1	EST_HUMAN	QV4-ST0234-181199-037-05 ST0234 Homo sapiens cDNA
525	13197	25639	0.92	1.0E-74	8922829	NT	Homo sapiens hypothetical protein FLJ11028 (FLJ11028), mRNA
532	13163	25644	10.17	1.0E-74	X02344.1	NT	Homo sapiens beta 2 gene
627	13254	25728	1.88	1.0E-74	4508020	NT	Homo sapiens zinc finger protein 259 (ZNF259) mRNA
1037	13847	26159	2.13	1.0E-74	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
2298	14842	27419	3.73	1.0E-74	AB002059.1	NT	Homo sapiens DNA for Human P2XM1, complete cds
3173	15786	28258	2.7	1.0E-74	4758697	NT	Homo sapiens mannosidase, alpha, class 2A, member 1 (MAN2A1), mRNA
3994	16592	29064	0.63	1.0E-74	4504116	NT	Homo sapiens glutamate receptor, ionotropic, kainate 1 (GRIK1) mRNA
3994	16592	29065	0.63	1.0E-74	4504116	NT	Homo sapiens glutamate receptor, ionotropic, kainate 1 (GRIK1) mRNA
4040	16638	29106	6.11	1.0E-74	AL163268.2	NT	Homo sapiens chromosome 21 segment HS21C068
4137	16729	29182	0.78	1.0E-74	BE083080.1	EST_HUMAN	RC2-BT0642-270300-019-08 BT0842 Homo sapiens cDNA
4354	16941	29383	0.75	1.0E-74	BE467769.1	EST_HUMAN	h73h08.x1 NCL CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3213663 3' similar to WP.B0511.12
5351	17911	30326	1.87	1.0E-74	DB3327.1	NT	CE17351
5806	19397	32211	1.51	1.0E-74	MB9914.1	NT	Homo sapiens DCRR1 mRNA, partial cds
7622	20135	33013	1.23	1.0E-74	11417977	NT	Human neurofibromin (NF1) gene, complete cds
8000	20542	33444	0.74	1.0E-74	BE549105.1	EST_HUMAN	Homo sapiens KIAA0852 protein (KIAA0852), mRNA
8000	20542	33445	0.74	1.0E-74	BE549105.1	EST_HUMAN	801070088F1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3456280 5'
8740	21279	34202	7.81	1.0E-74	AF214582.1	NT	801070088F1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3456280 5'
8768	21307	34230	0.61	1.0E-74	BF351951.1	EST_HUMAN	Homo sapiens tracheal epithelium enriched protein (PLUNC) gene, complete cds
10376	22870	35863	1.37	1.0E-74	11420549	NT	MR0-HT0559-230500-021-s03 HT0559 Homo sapiens cDNA
11659	24088	37144	1.95	1.0E-74	11417858	NT	Homo sapiens hypothetical protein FLJ10783 (FLJ10783), mRNA
11746	24145		3.39	1.0E-74	11417858	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2), mRNA
12400	24560		1.59	1.0E-74	AF240786.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
2670	15228		4.06	8.0E-75	AF176228.1	NT	Homo sapiens DNA cytosine-5 methyltransferase 3B (DNMT3B) mRNA, complete cds
12056	24339		2.18	8.0E-75	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
5376	17835		1.01	6.0E-75	AA789285.1	EST_HUMAN	aj28c06.s1 Soares testis_NHT Homo sapiens cDNA clone 1391628 3' similar to TR:Q15377 Q15377 Y-
8839	21378	34301	2.15	5.0E-75	BE272325.1	EST_HUMAN	CHROMOSOME RNA RECOGNITION MOTIF PROTEIN
9045	21582	34511	0.62	5.0E-75	AA132611.1	EST_HUMAN	601126068F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:2989865 5'
9122	21658	34599	0.8	5.0E-75	BE581655.1	EST_HUMAN	z017e08.r1 Strategene colon (#837204) Homo sapiens cDNA clone IMAGE:587174 5'
9122	21658	34600	0.8	5.0E-75	BE581655.1	EST_HUMAN	601346909F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3687458 5'
9295	21895	34842	1.39	5.0E-75	BF690254.1	EST_HUMAN	601346909F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3687458 5'

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Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10133	22628	35616	2.5	5.0E-75	AI838623.1	EST_HUMAN	tt31c12.x1 NCLCGAP_GC8 Homo sapiens cDNA clone IMAGE:2242390 3' similar to TR:P97361 P97361
117	12788	25270	1.81	4.0E-75	BE081333.1	EST_HUMAN	HYPOTHETICAL 20.1 KD PROTEIN ;
484	13117		1.21	4.0E-75	N36757.1	EST_HUMAN	QV1-BT0632-210200-079-002 BT0632 Homo sapiens cDNA
1802	14392	26937	1.43	4.0E-75	AW897230.1	EST_HUMAN	yx80j08.r1 Soares melanocyte 2NblHM Homo sapiens cDNA clone IMAGE:268055 5'
2874	15482	27982	5.4	4.0E-75	BE409484.1	EST_HUMAN	CMO-NN0057-150400-335-at11 NN0057 Homo sapiens cDNA
5720	18346	31048	0.71	4.0E-75		EST_HUMAN	601303866F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3638344 5'
5720	18348	31049	0.71	4.0E-75	11417946	NT	Homo sapiens NIPSNAP, C. elegans, homolog 1 (NIPSNAP1), mRNA
8415	19018	31801	0.71	4.0E-75	11417946	NT	Homo sapiens NIPSNAP, C. elegans, homolog 1 (NIPSNAP1), mRNA
8856	19444	32260	1.84	4.0E-75	11417946	NT	Homo sapiens NIPSNAP, C. elegans, homolog 1 (NIPSNAP1), mRNA
8856	19444	32261	1.84	4.0E-75	11417946	NT	Homo sapiens NIPSNAP, C. elegans, homolog 1 (NIPSNAP1), mRNA
10565	23101	36115	8.22	4.0E-75	7668505	NT	Homo sapiens myosin, heavy polypeptide 1, skeletal muscle, adult (MYH1), mRNA
1040	13650	26162	2.75	3.0E-75	AF157623.1	NT	Homo sapiens HTRA serine protease (PRSS11) gene, complete cds
1041	13650	26162	9.08	3.0E-75	AF157623.1	NT	Homo sapiens HTRA serine protease (PRSS11) gene, complete cds
1876	14462	27019	2.54	3.0E-75	AB071153.1	NT	Homo sapiens mRNA for KIAA0581 protein, partial cds
2158	14735	27308	1.47	3.0E-75	4507334	NT	Homo sapiens synapjanin 1 (SYNJ1), mRNA
2487	15034	27601	3.11	3.0E-75	4759153	NT	Homo sapiens synapjanin 1 (SYNJ1), mRNA
3056	15672	28148	0.85	3.0E-75	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
3223	15835	28313	1.12	3.0E-75	AB011153.1	NT	Homo sapiens mRNA for KIAA0581 protein, partial cds
3393	16001	28480	0.83	3.0E-75	M72393.1	NT	Human calcium-dependent phospholipid-binding protein (PLA2) mRNA, complete cds
3393	16001	28481	0.83	3.0E-75	M72393.1	NT	Human calcium-dependent phospholipid-binding protein (PLA2) mRNA, complete cds
4530	17114	29558	0.87	3.0E-75	7662421	NT	Homo sapiens KIAA0871 protein (KIAA0871), mRNA
5367	17927		0.81	3.0E-75	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
5458	18083	30409	1.01	3.0E-75	11420956	NT	Homo sapiens adaptor-related protein complex 1, sigma 2 subunit (AP1S2), mRNA
5458	18083	30410	1.01	3.0E-75	11420956	NT	Homo sapiens adaptor-related protein complex 1, sigma 2 subunit (AP1S2), mRNA
6867	19601	32432	1.42	3.0E-75	11526319	NT	Homo sapiens HIR (histone cell cycle regulation defective, S. cerevisiae) homolog A (HIRA), mRNA
6867	19601	32433	1.42	3.0E-75	11526319	NT	Homo sapiens HIR (histone cell cycle regulation defective, S. cerevisiae) homolog A (HIRA), mRNA
7189	19721	32568	4.6	3.0E-75	7662209	NT	Homo sapiens KIAA0623 gene product (KIAA0623), mRNA
7189	19721	32569	4.8	3.0E-75	7662209	NT	Homo sapiens KIAA0623 gene product (KIAA0623), mRNA
7618	20131	33006	3.35	3.0E-75	4885632	NT	Homo sapiens Oncogene TIM (TIM) mRNA
7618	20131	33007	3.35	3.0E-75	4885632	NT	Homo sapiens Oncogene TIM (TIM) mRNA
8915	21453	34374	1.23	3.0E-75	11420804	NT	Homo sapiens snail 1 (drosophila homolog), zinc finger protein (SNA11), mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9598	22066	35059	0.85	3.0E-75	11420222	NT	Homo sapiens Drosophila Kech like protein (DKELGHL), mRNA
10435	22828	35938	3.75	3.0E-75	11436430	NT	Homo sapiens synuclein, alpha (non A4 component of amyloid precursor) (SNCA), mRNA
5853	18477		1.45	2.0E-75	AV734680.1	EST_HUMAN	AV734680 cDNA Homo sapiens cDNA clone cdABED02.5
8885	21224	34144	2.43	2.0E-75	A1311783.1	EST_HUMAN	gc91602.x1 NCL CGAP_Kids Homo sapiens cDNA clone IMAGE:1915898 3' similar to TR:Q69398 Q69386 POL/ENV GENE:
2341	14912	27485	4.05	1.0E-75	AW168135.1	EST_HUMAN	xg60d02.x1 NCL CGAP_U14 Homo sapiens cDNA clone IMAGE:2632707 3' similar to contains PTR7.t1
2973	15589	28072	3.23	1.0E-75	X52221.1	NT	PTR7 repetitive element:
5356	17916	30331	0.57	1.0E-75	BE894192.1	EST_HUMAN	H. sapiens ERCC2 gene, exons 1 & 2 (partial)
8353	20893		13.67	1.0E-75	AA399270.1	EST_HUMAN	601437130F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3922303 5'
9349	21863	34812	4.14	1.0E-75	BF313645.1	EST_HUMAN	z157n03.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:726485 3' similar to gb:M13932 40S RIBOSOMAL PROTEIN S17 (HUMAN);
9349	21863	34813	4.14	1.0E-75	BF313645.1	EST_HUMAN	601900294F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4128678 5'
10763	23287		6.58	1.0E-75	AA684377.1	EST_HUMAN	601900294F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4128678 5'
10970	23485	36513	3.06	1.0E-75	AF223391.1	NT	ac77b08.s1 Strategene lung (#937210) Homo sapiens cDNA clone IMAGE:888589 3'
11945	17916	30331	2.58	1.0E-75	BE894192.1	EST_HUMAN	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
48	12728	25191	2.19	9.0E-76	A1652648.1	EST_HUMAN	601437130F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3922303 5'
48	12728	25192	2.19	9.0E-76	A1652648.1	EST_HUMAN	w630b10.x1 NCL CGAP_GC6 Homo sapiens cDNA clone IMAGE:2307163 3' similar to TR:O75235 O75235 TRAP1;
9815	22313	35284	62.44	9.0E-76	MT2937.1	NT	w630b10.x1 NCL CGAP_GC6 Homo sapiens cDNA clone IMAGE:2307163 3' similar to TR:O75235 O75235 TRAP1;
154	12817	25305	9	8.0E-76	AF154830.1	NT	Human ferritin Heavy subunit mRNA, complete cds
974	13586	26100	10.38	8.0E-76	4504374	NT	Homo sapiens carbamyl phosphate synthetase I mRNA, complete cds
974	13586	26101	10.38	8.0E-76	4504374	NT	Homo sapiens H factor 1 (complement) (HF1) mRNA
2935	15551	28028	1.25	8.0E-76	7706724	NT	Homo sapiens H factor 1 (complement) (HF1) mRNA
6319	18928	31703	5.69	8.0E-76	11421442	NT	Homo sapiens mediator (Sur2), mRNA
7500	20022	32885	1.84	8.0E-76	11435215	NT	Homo sapiens LIM domain kinase 1 (LIMK1), mRNA
7567	20084	32860	0.94	8.0E-76	11419212	NT	Homo sapiens serine/threonine kinase 2 (STK2), mRNA
8237	20776	33699	0.81	8.0E-76	11416961	NT	Homo sapiens mitochondrial carrier family protein (LOC55972), mRNA
10280	22775	35764	1.25	8.0E-76	M13792.1	NT	Homo sapiens AIM-1 protein (LOC51151), mRNA
10548	23083	36097	7.29	8.0E-76	10442821	NT	Human adenosine deaminase (ADA) gene, complete cds
12305	24501		2.28	8.0E-76	11417862	NT	Homo sapiens baculoviral IAP repeat-containing 8 (BIRC8), mRNA
							Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
808	13425	25931	2.84	7.0E-76	5016092	NT	Homo sapiens dihydropyrimidine dehydrogenase (E3 component of pyruvate dehydrogenase complex, 2-oxo-glutarate complex, branched chain keto acid dehydrogenase complex) (DLD) mRNA
3333	15943	28418	3.23	7.0E-76	AF058490.1	NT	Homo sapiens cAMP-specific phosphodiesterase 8A (PDE8A) mRNA, partial cds
3339	15949	28425	5.78	7.0E-76	4505052	NT	Homo sapiens lymphocyte antigen 75 (LY75) mRNA, and translated products
3379	15988	28467	1.99	7.0E-76	4757915	NT	Homo sapiens core-binding factor, runt domain, alpha subunit 2; translocated to, 1; cyclin D-related (CBFA2T1) mRNA
4481	17047	29490	6.32	7.0E-76	4507184	NT	Homo sapiens sepiapterin reductase (7,8-dihydrobiopterin:NADP+ oxidoreductase) (SPR) mRNA
4481	17047	29491	6.32	7.0E-76	4507184	NT	Homo sapiens sepiapterin reductase (7,8-dihydrobiopterin:NADP+ oxidoreductase) (SPR) mRNA
1277	13872	36047	30.59	6.0E-76	BE396253.1	EST_HUMAN	601312019F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3658757 5'
11340	23038	36047	2.97	6.0E-76	BE273201.1	EST_HUMAN	601142253F1 NIH_MGC_14 Homo sapiens cDNA clone IMAGE:3506029 5'
1986	14568	27128	8.39	5.0E-76	D63874.1	NT	Human mRNA for HMG-1, complete cds
1986	14568	27129	8.39	5.0E-76	D63874.1	NT	Human mRNA for HMG-1, complete cds
1986	14568	27130	8.39	5.0E-76	D63874.1	NT	Human mRNA for HMG-1, complete cds
3242	15954	28336	0.68	4.0E-76	BE14096.1	EST_HUMAN	QV3-BN0047-270700-283-q06 BN0047 Homo sapiens cDNA
5474	18108	30427	1.22	4.0E-76	BE783412.1	EST_HUMAN	601471725F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3874470 5'
9937	22432	35407	5.79	4.0E-76	D81625.1	EST_HUMAN	HUM178G01B Human fetal brain (TFujiwara) Homo sapiens cDNA clone GEN-178G01 5'
9937	22432	35408	5.79	4.0E-76	D81625.1	EST_HUMAN	HUM178G01B Human fetal brain (TFujiwara) Homo sapiens cDNA clone GEN-178G01 5'
657	13280	25759	1.63	3.0E-76	BF516282.1	EST_HUMAN	UI-H-BW1-anz-b-04-Q-J1.s1 NCI_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3083862 3'
657	13280	25760	1.63	3.0E-76	BF516282.1	EST_HUMAN	UI-H-BW1-anz-b-04-Q-J1.s1 NCI_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3083862 3'
1843	14235	26769	7.45	3.0E-76	4503476	NT	Homo sapiens eukaryotic translation elongation factor 1 beta 2 (EEF1B2) mRNA
1643	14235	26770	7.45	3.0E-76	4503476	NT	Homo sapiens eukaryotic translation elongation factor 1 beta 2 (EEF1B2) mRNA
3478	16082	28555	5.2	3.0E-76	BF375689.1	EST_HUMAN	RC5-ST0300-180100-033-A03 ST0300 Homo sapiens cDNA
3478	16082	28556	5.2	3.0E-76	BF375689.1	EST_HUMAN	RC5-ST0300-180100-033-A03 ST0300 Homo sapiens cDNA
5447	18018	37140	2.41	3.0E-76	Z41314.1	EST_HUMAN	HSCZQD042 normalized infant brain cDNA Homo sapiens cDNA clone c-zqd04 3'
5908	18530	31255	1.06	3.0E-76	AA160811.1	EST_HUMAN	z073c07.1 Strabagene pancreas (4637208) Homo sapiens cDNA clone IMAGE:592524 5' similar to gb:L32976 MIXED LINEAGE KINASE 1 (HUMAN);
8508	19108	31981	7.49	3.0E-76	AF286598.1	NT	Homo sapiens angiotensin binding protein 1 mRNA, complete cds
8091	20632	33545	1.03	3.0E-76	N42671.1	EST_HUMAN	y22g10.11 Soares melanocyte 2NHM Homo sapiens cDNA clone IMAGE:271842 5'
9832	22132	35097	2.91	3.0E-76	AW296933.1	EST_HUMAN	xs49h01.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2773009 3'
9858	22155	35125	1.11	3.0E-76	AA442309.1	EST_HUMAN	zv54d11.1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:757481 5'
9858	22155	35126	1.11	3.0E-76	AA442309.1	EST_HUMAN	zv54d11.1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:757481 5'
11849	24884	30706	1.73	3.0E-76	AW987984.1	EST_HUMAN	EST380059 MAGe resequences, MAGJ Homo sapiens cDNA
11760	25080	30501	4.85	3.0E-76	AW956455.1	EST_HUMAN	EST368525 MAGe resequences, MAGD Homo sapiens cDNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descripr
303	12858	25448	1.1	2.0E-78	D84295.1	NT	Human mRNA for possible protein TPRDII, complete cds
384	13013	25495	2.12	2.0E-78	D84295.1	NT	Human mRNA for possible protein TPRDII, complete cds
384	13013	25496	2.12	2.0E-78	D84295.1	NT	Human mRNA for possible protein TPRDII, complete cds
486	13119		1.12	2.0E-78	4557662	NT	Homo sapiens immunoglobulin (CD79A) binding protein 1 (IGBP1) mRNA
618	13243	25717	1.45	2.0E-78	4503944	NT	Homo sapiens glucagon (GCG) mRNA
1088	13673	26186	1.57	2.0E-78	4758053	NT	Homo sapiens cAMP responsive element binding protein 1 (CREB1) mRNA
1583	14176	28708	0.99	2.0E-78	4504028	NT	Homo sapiens GM2 ganglioside activator protein (GM2A) mRNA
1583	14176	28709	0.99	2.0E-78	4504028	NT	Homo sapiens GM2 ganglioside activator protein (GM2A) mRNA
1972	14556	27113	1.04	2.0E-78	AA253954.1	EST_HUMAN	zs60H11. s1 Strategene schizo brain S11 Homo sapiens cDNA clone IMAGE:701925 3'
2867	15485	27958	2.64	2.0E-78	P23286	SWISSPROT	OLFACTORY RECEPTOR-LIKE PROTEIN F5
3336	15946	28422	2.3	2.0E-78	AA445992.1	EST_HUMAN	zw64602.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:780986 3' similar to SW:ITB5_HUMAN
3336	15946	28423	2.3	2.0E-78	AA445992.1	EST_HUMAN	P18084 INTEGRIN BETA-5 SUBUNIT PRECURSOR. ;
3832	16431	28893	0.7	2.0E-78	AA400700.1	EST_HUMAN	zw64602.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:780986 3' similar to SW:ITB5_HUMAN
4215	12858	25448	0.62	2.0E-78	D84295.1	NT	CE00281 ;
5082	17855	30096	7.33	2.0E-78	AW879618.1	EST_HUMAN	Human mRNA for possible protein TPRDII, complete cds
5512	18145		0.98	2.0E-78	AF127845.1	NT	QV3-OT0028-220300-132-b11 OT0028 Homo sapiens cDNA
5803	18428	31147	4.95	2.0E-78	AB029004.1	NT	Gorilla gorilla olfactory receptor (GGO18) gene, partial cds
7442	18968	32833	0.72	2.0E-78	11421326	NT	Homo sapiens mRNA for KIAA1091 protein, partial cds
7658	20170	33057	1.84	2.0E-78	11427410	NT	Homo sapiens KIAA0783 gene product (KIAA0783), mRNA
10182	22877	35870	7.63	2.0E-78	11437211	NT	Homo sapiens TPCR86 protein (HSTPCR86P), mRNA
10801	23324	36334	2.79	2.0E-78	BE796537.1	EST_HUMAN	Homo sapiens similar to ribosomal protein S26 (H. sapiens) (LOC83150), mRNA
4385	18972	29420	4.17	1.0E-78	D63874.1	NT	Homo sapiens HIRA interacting protein 4 (dnaj-like) (HIRIP4), mRNA
4385	18972	29421	4.17	1.0E-78	D63874.1	NT	Human mRNA for HMG-1, complete cds
5939	18268	30741	5.55	1.0E-78	BE796537.1	EST_HUMAN	Human mRNA for HMG-1, complete cds
6391	18994		0.7	1.0E-78	AA333207.1	EST_HUMAN	601598989F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3944302 5'
7003	19501	32320	4.41	9.0E-77	BE889525.1	EST_HUMAN	EST37301 Embryo, 8 week 1 Homo sapiens cDNA 5' end
11115	23625	36667	1.68	9.0E-77	4506022	NT	601512435F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3913737 5'
12474	24588		1.9	9.0E-77	BE410354.1	EST_HUMAN	Homo sapiens protein phosphatase 2, regulatory subunit B (B56), gamma isoform (PPP2R5C) mRNA
200	12860	25344	1.38	8.0E-77	R63144.1	EST_HUMAN	YP11102.1 Soares breast3NHBst Homo sapiens cDNA clone IMAGE:3838753 5'
							SP-ANKB_HUMAN Q01484 ANKYRIN, BRAIN VARIANT 1 ;

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4620	17203	29652	1.27	8.0E-77	BF205181.1	EST_HUMAN	601866928F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4109503 5'
5644	18273	30747	2.93	8.0E-77	4506230	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, non-ATPase, 7 (Mox34 homolog) (PSMD7) mRNA
11264	23792	36849	2.67	8.0E-77	AA019770.1	EST_HUMAN	ze62e02.r1 Soares retina N2b4HR Homo sapiens cDNA clone IMAGE:363578 5'
11284	23792	36850	2.67	8.0E-77	AA019770.1	EST_HUMAN	ze62e02.r1 Soares retina N2b4HR Homo sapiens cDNA clone IMAGE:363578 5'
12451	24585	30916	21.88	8.0E-77	R00245.1	EST_HUMAN	ye69f04.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:123007 3' similar to contains MER10 repetitive element:
1973	14557	27114	2.58	7.0E-77	AA625755.1	EST_HUMAN	zu81g01.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:745392 3'
2455	15022	27593	1.98	7.0E-77	4505944	NT	Homo sapiens polymerase (RNA) II (DNA directed) polypeptide E (25kD) (POLR2E) mRNA
2455	15022	27594	1.98	7.0E-77	4505944	NT	Homo sapiens polymerase (RNA) II (DNA directed) polypeptide E (25kD) (POLR2E) mRNA
284	12940	25426	3.52	6.0E-77	4504600	NT	Homo sapiens interferon (alpha, beta and omega) receptor 2 (IFNAR2) mRNA
1181	13783	26293	3.04	6.0E-77	AW957753.1	EST_HUMAN	EST369823 MAGE resequences, MAGE Homo sapiens cDNA
1590	14183	26716	2.97	6.0E-77	AI204089.1	EST_HUMAN	qe77h12.x1 Soares_fetal_lung_NHHL19W Homo sapiens cDNA clone IMAGE:1745063 3'
156	12819	25307	3.77	5.0E-77	AF154830.1	NT	Homo sapiens carbamyl phosphate synthetase I mRNA, complete cds
156	12819	25308	3.77	5.0E-77	AF154830.1	NT	Homo sapiens carbamyl phosphate synthetase I mRNA, complete cds
1279	13874	26394	1.69	5.0E-77	AF041015.1	NT	7 Homo sapiens glucokinase (GCK) gene, exon 2
1404	13987	26526	1.53	5.0E-77	4557250	NT	Homo sapiens disintegrin and metalloprotease domain 10 (ADAM10) mRNA
2792	15345	27914	0.98	5.0E-77	4503160	NT	Homo sapiens cullin 1 (CUL1) mRNA
3574	16178	28661	1.03	5.0E-77	8394518	NT	Homo sapiens ubiquitin specific protease 18 (USP18), mRNA
4813	17391	29842	1.08	5.0E-77	5031660	NT	Homo sapiens EGF-like repeats and discoidin I-like domains 3 (EDIL3), mRNA
4813	17391	29843	1.08	5.0E-77	5031660	NT	Homo sapiens EGF-like repeats and discoidin I-like domains 3 (EDIL3), mRNA
5071	17644	30086	2.22	5.0E-77	AL043953.1	EST_HUMAN	DKFZp434G1728_r1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434G1728 5'
5419	17976	30384	1.77	5.0E-77	AA861184.1	EST_HUMAN	ak33a05.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1407728 3' similar to contains Alu repetitive element:contains element PTR7 PTR7 repetitive element:
6879	19613	32447	0.71	5.0E-77	M13975.1	NT	Homo sapiens protein kinase C beta-II type (PRKCB1) mRNA, complete cds
7366	19892	32755	0.68	5.0E-77	X98296.1	NT	H. sapiens mRNA for ubiquitin hydrolase
7592	19892	32755	0.75	5.0E-77	X98296.1	NT	H. sapiens mRNA for ubiquitin hydrolase
8309	20850	33773	1.07	5.0E-77	11428849	NT	Homo sapiens 3-hydroxyisobutyryl-Coenzyme A hydrolase (HIBCH), mRNA
8309	20850	33774	1.07	5.0E-77	11428849	NT	Homo sapiens 3-hydroxyisobutyryl-Coenzyme A hydrolase (HIBCH), mRNA
9489	21945	34693	3.52	5.0E-77	11421928	NT	Homo sapiens sorting nexin 5 (SNX5), mRNA
9489	21945	34694	3.52	5.0E-77	11421928	NT	Homo sapiens sorting nexin 5 (SNX5), mRNA
10385	22879	35872	0.51	5.0E-77	AB002287.1	NT	Human mRNA for KIAA0289 gene, partial cds
10385	22879	35873	0.51	5.0E-77	AB002287.1	NT	Human mRNA for KIAA0289 gene, partial cds
2015	14597	27160	1.12	3.0E-77	5730038	NT	Homo sapiens SET domain and mariner transposase fusion gene (SETMAR) mRNA

Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2015	14597	27161	1.12	3.0E-77	5730038	NT	Homo sapiens SET domain and mariner transposase fusion gene (SETMAR) mRNA
10189	22884	35875	0.82	3.0E-77	H65187.1	EST_HUMAN	y64g01.1 Weizmann Olfactory Epithelium Homo sapiens cDNA clone IMAGE:238608 5' similar to SP:S17447 S17447 PROBABLE LIGAND-BINDING PROTEIN RY2G5 - ;
10189	22884	35876	0.82	3.0E-77	H65187.1	EST_HUMAN	y64g01.1 Weizmann Olfactory Epithelium Homo sapiens cDNA clone IMAGE:238608 5' similar to SP:S17447 S17447 PROBABLE LIGAND-BINDING PROTEIN RY2G5 - ;
10493	22887	35994	0.51	3.0E-77	A1017333.1	EST_HUMAN	ov31h07.x1 Soares_testis NHT Homo sapiens cDNA clone IMAGE:1638973 3'
10493	22887	35995	0.51	3.0E-77	A1017333.1	EST_HUMAN	ov31h07.x1 Soares_testis NHT Homo sapiens cDNA clone IMAGE:1638973 3'
10754	23278	36291	4.39	3.0E-77	BF359817.1	EST_HUMAN	PV6-MT0078-080800-005-g03 MT0078 Homo sapiens cDNA
1398	13990	28517	1.82	2.0E-77	AV784617.1	EST_HUMAN	AV784617 MDS Homo sapiens cDNA clone MDSBT10 5'
1479	14072	26811	3.43	2.0E-77	AW987712.1	EST_HUMAN	RC3-BN0053-170200-011-h01 BN0053 Homo sapiens cDNA
2138	14716	27288	1.24	2.0E-77	L41825.1	NT	Homo sapiens CYP17 gene, 5' end
2151	14728	27301	2.37	2.0E-77	7708315	NT	Homo sapiens CGI-79 protein (LOC51634), mRNA
2630	15471	27760	2.26	2.0E-77	AB037836.1	NT	Homo sapiens mRNA for KIAA1415 protein, partial cds
2630	15471	27761	2.26	2.0E-77	AB037836.1	NT	Homo sapiens mRNA for KIAA1415 protein, partial cds
4105	16699	29153	1.38	2.0E-77	BE044316.1	EST_HUMAN	h043b05.x1 Soares_NFL T_GBC S1 Homo sapiens cDNA clone IMAGE:3040113 3' similar to SW:GAG2_HUMAN P10264 RETROVIRUS-RELATED GAG POLYPROTEIN ;
4504	17088	29536	0.85	2.0E-77	A1613519.1	EST_HUMAN	tw22g02.x1 NCI CGAP Bm52 Homo sapiens cDNA clone IMAGE:2260466 3' similar to TR:O65245
4504	17088	29537	0.85	2.0E-77	A1613519.1	EST_HUMAN	tw22g02.x1 NCI CGAP Bm52 Homo sapiens cDNA clone IMAGE:2260466 3' similar to TR:O65245
4701	17283		1.38	2.0E-77	450-4068	NT	Homo sapiens glutamic-oxaloacetic transaminase 2, mitochondrial (aspartate aminotransferase 2) (GOT2), nuclear gene encoding mitochondrial protein, mRNA
4883	17458	29810	4.3	2.0E-77	AA653025.1	EST_HUMAN	ns68g12.s1 NCI CGAP_P12 Homo sapiens cDNA clone IMAGE:1188838 similar to SW:RL28_HUMAN P47914 60S RIBOSOMAL PROTEIN L29 [1]; contains element MSR1 repetitive element ;
6109	18725	31478	1.78	2.0E-77	BE288940.1	EST_HUMAN	801119852F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3028436 5'
6320	18927	31704	1.68	2.0E-77	BE787143.1	EST_HUMAN	801476802F1 NIH_MGC_88 Homo sapiens cDNA clone IMAGE:3879505 5'
7228	19757	32612	14.03	2.0E-77	A1833003.1	EST_HUMAN	at74g09.x1 Barstead colon HPLRB7 Homo sapiens cDNA clone IMAGE:2377720 3' similar to TR:Q13311 Q13311 TAX1-BINDING PROTEIN TXBP151 [1];
8468	21006	33924	0.9	2.0E-77	A1362707.1	EST_HUMAN	qy70c09.x1 NCI CGAP Bm25 Homo sapiens cDNA clone IMAGE:2017380 3' similar to WP:F29D11.1 CE05765 LOW DENSITY LIPID RECEPTOR-RELATED PROTEIN ;
9447	21973	34924	4.56	2.0E-77	U50321.1	NT	Human protein kinase C substrate 80K-H (PRKCSH) gene, exon 7
9447	21973	34925	4.56	2.0E-77	U50321.1	NT	Human protein kinase C substrate 80K-H (PRKCSH) gene, exon 7
9808	22403	35377	0.55	2.0E-77	BF310349.1	EST_HUMAN	601895183F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4124541 5'

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9906	22403	35378	0.55	2.0E-77	BF310349.1	EST_HUMAN	601895183F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4124541 5'
47	12726	25187	1.39	1.0E-77	AB033102.1	NT	Homo sapiens mRNA for KIAA1276 protein, partial cds
47	12726	25188	1.39	1.0E-77	AB033102.1	NT	Homo sapiens mRNA for KIAA1276 protein, partial cds
294	12950	25437	2.09	1.0E-77	4502166	NT	Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA
284	12950	25438	2.09	1.0E-77	4502166	NT	Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA
908	15428	26041	2.96	1.0E-77	4502166	NT	Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA
908	15428	26042	2.96	1.0E-77	4502166	NT	Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA
1963	14547	27104	1.41	1.0E-77	AW058119.1	EST_HUMAN	w63e05.x1 Scarsa_thymus_NHFTn Homo sapiens cDNA clone IMAGE:2538160 3'
2488	15053	27625	0.99	1.0E-77	AB028024.1	NT	Homo sapiens mRNA for KIAA1101 protein, complete cds
3081	15896	28168	2.82	1.0E-77	4503300	NT	Homo sapiens 2,4-dienoyl CoA reductase 1, mitochondrial (DECR1), mRNA
4445	17031	28472	3.95	1.0E-77	7706299	NT	Homo sapiens CGI-60 protein (LOC51626), mRNA
4622	17205	28654	20.39	1.0E-77	AJ229041.1	NT	Homo sapiens 959 kb contig between AML1 and CBR1 on chromosome 21q22; segment 1/3
4755	17336	29780	3.41	1.0E-77	6552322	NT	Homo sapiens breast cancer 1, early onset (BRCA1), transcript variant BRCA1-exon4, mRNA
5098	17180	29627	0.59	1.0E-77	4758053	NT	Homo sapiens cAMP responsive element binding protein 1 (CREB1) mRNA
5228	17792	30211	1.05	1.0E-77	7681849	NT	Homo sapiens KIAA0005 gene product (KIAA0005), mRNA
5228	17792	30212	1.05	1.0E-77	7681849	NT	Homo sapiens KIAA0005 gene product (KIAA0005), mRNA
5387	17946		4.13	1.0E-77	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047
6086	18702	31449	1.46	1.0E-77	AF086944.1	NT	Homo sapiens dynactin 1 (DCTN1) gene, exons 27 and 28
6086	18702	31450	1.46	1.0E-77	AF086944.1	NT	Homo sapiens dynactin 1 (DCTN1) gene, exons 27 and 28
6198	18808	31577	1.4	1.0E-77	M25844.1	NT	Human von Willebrand factor gene, exon 20
6575	19173	31972	1.45	1.0E-77	4885182	NT	Homo sapiens diaphanous (Drosophila, homolog) 1 (DIAPH1), mRNA
7114	19454	32270	15.68	1.0E-77	5881412	NT	Homo sapiens elastin (supravalvular aortic stenosis, Williams-Beuren syndrome) (ELN), mRNA
7661	20173	33060	0.92	1.0E-77	11420159	NT	Homo sapiens cullin 1 (CUL1), mRNA
7740	20248	33141	0.78	1.0E-77	X04571.1	NT	Human mRNA for kidney epidermal growth factor (EGF) precursor
9189	21706	34649	1.31	1.0E-77	X94354.1	NT	H. sapiens DNA for Cone cGMP-PDE gene
9189	21706	34650	1.31	1.0E-77	X94354.1	NT	H. sapiens DNA for Cone cGMP-PDE gene
10416	22910	35009	1.01	1.0E-77	AB028098.1	NT	Homo sapiens hu-GlcAT-P mRNA for glucuronyltransferase, complete cds
10416	22910	35910	1.01	1.0E-77	AB028098.1	NT	Homo sapiens hu-GlcAT-P mRNA for glucuronyltransferase, complete cds
10996	22471	36496	2.92	1.0E-77	11433428	NT	Homo sapiens meningioma expressed antigen 8 (coiled-coil proline-rich) (MGEA8), mRNA
10444	22938	35048	2.4	9.0E-78	AW753302.1	EST_HUMAN	RC3-C10254-280999-011-b05 C10254 Homo sapiens cDNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6574	19172	31970	4.74	8.0E-78	AW947081.1	EST_HUMAN	RC2-ET0023-080500-012-005 ET0023 Homo sapiens cDNA
6574	19172	31971	4.74	8.0E-78	AW947081.1	EST_HUMAN	RC2-ET0023-080500-012-005 ET0023 Homo sapiens cDNA
89	12765	25248	1.48	8.0E-78	AU118789.1	EST_HUMAN	AU118789 HEMBA1 Homo sapiens cDNA clone HEMBA1004354 5'
89	12765	25249	1.48	8.0E-78	AU118789.1	EST_HUMAN	AU118789 HEMBA1 Homo sapiens cDNA clone HEMBA1004354 5'
3356	15964	28441	0.72	8.0E-78	BF344101.1	EST_HUMAN	602016928F1 NCL CGAP_Bim84 Homo sapiens cDNA clone IMAGE:4152511 5'
6677	19273		2.29	8.0E-78	11432710	NT	Homo sapiens GDNF family receptor alpha 1 (GFRAL1), mRNA
234	12894	25377	4.78	5.0E-78	11422488	NT	Homo sapiens hypothetical protein FLJ11316 (FLJ11316), mRNA
2597	15159	27727	4.1	5.0E-78	AW673424.1	EST_HUMAN	ba54h03.y3 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:2900405 5' similar to WP.Y4886A.6
3432	16040	28522	3.88	5.0E-78	M55586.1	NT	Human collagenase type IV (CLG4) gene, exon 6
5607	18236	30886	2.29	5.0E-78	AF038536.1	NT	Homo sapiens Best's macular dystrophy related protein mRNA, partial cds
5764	18390	31102	24.58	5.0E-78	11418585	NT	Homo sapiens transforming growth factor, beta-induced, 68kD (TGFB1), mRNA
7208	19739	32593	2.2	5.0E-78	AW953120.1	EST_HUMAN	EST365190 IMAGE resequences, MAGB Homo sapiens cDNA
9012	21549	34478	6.88	5.0E-78	U60889.1	NT	Human lysosomal alpha-mannosidase (manB) gene, exon 7
9013	21550	34479	3.6	5.0E-78	BE960336.1	EST_HUMAN	601648061F1 NIH_MGC_62 Homo sapiens cDNA clone IMAGE:3931887 5'
1176	13778	26288	1.84	4.0E-78	AL043314.2	EST_HUMAN	DKFZp434N0323_r1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434N0323 5'
1565	14157	26688	1.99	4.0E-78	AL355841.1	NT	Novel human gene mapping to chromosome 22
2357	14928	27502	2.97	4.0E-78	AF107405.1	NT	Homo sapiens pre-mRNA splicing factor (SFRS3) mRNA, complete cds
4414	18989	29441	1.23	4.0E-78	7656876	NT	Homo sapiens syncytin (LOC30816), mRNA
4837	17462	28915	1.91	4.0E-78	4505806	NT	Homo sapiens phosphatidylinositol 4-kinase, catalytic, alpha polypeptide (PIK4CA) mRNA
4837	17462	28916	1.91	4.0E-78	4505806	NT	Homo sapiens phosphatidylinositol 4-kinase, catalytic, alpha polypeptide (PIK4CA) mRNA
5941	18561	31290	0.97	4.0E-78	11420732	NT	Homo sapiens SFRS3 protein kinase 2 (SRPK2), mRNA
7502	20024	32888	0.77	4.0E-78	4508736	NT	Homo sapiens ribosomal protein S6 kinase, 70kD, polypeptide 1 (RPS6KB1) mRNA
8787	21326	34250	1.51	4.0E-78	AF012872.1	NT	Homo sapiens phosphatidylinositol 4-kinase 230 (pi4K230) mRNA, complete cds
8787	21326	34251	1.51	4.0E-78	AF012872.1	NT	Homo sapiens phosphatidylinositol 4-kinase 230 (pi4K230) mRNA, complete cds
9290	21890	34837	0.61	4.0E-78	11417251	NT	Homo sapiens X-ray repair complementing defective repair in Chinese hamster cells 4 (XRCC4), mRNA
10341	22835	35829	2.03	4.0E-78	11560151	NT	Homo sapiens hypothetical C2H2 zinc finger protein FLJ22504 (FLJ22504), mRNA
10341	22835	35830	2.03	4.0E-78	11560151	NT	Homo sapiens hypothetical C2H2 zinc finger protein FLJ22504 (FLJ22504), mRNA
10841	23173	36185	1.87	4.0E-78	11426810	NT	Homo sapiens regulatory factor X-associated ankyrin-containing protein (RXANK), mRNA
11297	23749	36806	2.09	4.0E-78	AF169148.1	NT	Homo sapiens s-CaBP1 (CABP1) mRNA, complete cds
11432	23882	36948	4.15	4.0E-78	X05844.1	NT	Human transforming growth factor-beta precursor gene exons 4-5 (and joined mature peptide)
12337	24520	30923	4.58	4.0E-78	AB011399.1	NT	Homo sapiens gene for AF-6, complete cds
172	12835	25318	2.42	3.0E-78	AF095901.1	NT	Homo sapiens eRF1 gene, complete cds

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Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
172	12835	25319	2.42	3.0E-78	AF095901.1	NT	Homo sapiens eRF1 gene, complete cds
3827	16427		1.15	3.0E-78	AU140604.1	EST_HUMAN	AU140604 PLACE3 Homo sapiens cDNA clone PLACE3000373 5'
4180	16486	28947	0.78	3.0E-78	4507334	NT	Homo sapiens synaptotagmin 1 (SYNJ1), mRNA
10186	22681		5.78	3.0E-78	BE144758.1	EST_HUMAN	CMO-HT0180-041099-085-c07 HT0180 Homo sapiens cDNA
10860	23381	36400	5.65	3.0E-78	BE156318.1	EST_HUMAN	QV0-HT0367-150200-114-g09 HT0367 Homo sapiens cDNA
3155	15769		2.54	2.0E-78	U04489.1	NT	Homo sapiens type IV collagen alpha 5 chain (COL4A5) gene, exon 20
4086	16882		1.8	2.0E-78	AA311872.1	EST_HUMAN	EST182583 Jurkat T-cells VI Homo sapiens cDNA 5' end
7483	20006	32870	1.38	2.0E-78	AW402308.1	EST_HUMAN	UIHF-BKO-seq-g-10-0-UI.r1 NIH_MGC_36 Homo sapiens cDNA clone IMAGE:3054139 5'
7483	20006	32871	1.38	2.0E-78	AW402308.1	EST_HUMAN	UIHF-BKO-seq-g-10-0-UI.r1 NIH_MGC_36 Homo sapiens cDNA clone IMAGE:3054139 5'
7714	20223	33110	3.47	2.0E-78	BF689800.1	EST_HUMAN	802186529F1 NIH_MGC_49 Homo sapiens cDNA clone IMAGE:4288599 5'
7684	20526	33432	1.73	2.0E-78	AV714177.1	EST_HUMAN	AV714177 DCB Homo sapiens cDNA clone DCBBAW09 5'
8389	20929	33848	1.8	2.0E-78	AI557509.1	EST_HUMAN	P2.1_16 B07.r tumor2 Homo sapiens cDNA 3'
8389	20929	33849	1.8	2.0E-78	AI557509.1	EST_HUMAN	P2.1_16 B07.r tumor2 Homo sapiens cDNA 3'
10959	23474	36499	3.39	2.0E-78	AI197837.1	EST_HUMAN	q50h05.x1 NCI CGAP_Bn25 Homo sapiens cDNA clone IMAGE:1859961 3' similar to WP.R60.1
11003	23517	36552	3.47	2.0E-78	N66951.1	EST_HUMAN	CE06325 PROTEIN KINASE:
5508	18141	30553	2.63	1.0E-78	11417304	NT	z44812.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:285823 3'
7035	18055	30478	1.91	1.0E-78	AV648699.1	EST_HUMAN	Homo sapiens GAP-like protein (LOC51306), mRNA
8100	20641		2.25	1.0E-78	U52373.1	NT	AV648699 GLC Homo sapiens cDNA clone GLCBMC01 3'
11832	24197	31037	2.17	1.0E-78	11430480	NT	Human serine/threonine kinase MNB (mnb) mRNA, complete cds
							Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
11928	24261	31014	1.41	1.0E-78	11435903	NT	Homo sapiens similar to lymphocyte activation-associated protein (H. sapiens) (LOC63140), mRNA
4808	17386	29836	4.05	9.0E-79	11525861	NT	Homo sapiens peptide YY (PYY), mRNA
4868	17562	30006	3.34	9.0E-79	BE000837.1	EST_HUMAN	RC2-BN0074-090300-014-c12 BN0074 Homo sapiens cDNA
5624	18253	30722	13.77	9.0E-79	AB028070.1	NT	Homo sapiens mRNA for activator of S phase Kinase, complete cds
6482	19083	31864	2.48	9.0E-79	5454145	NT	Homo sapiens ubiquitin-conjugating enzyme E2E 3 (homologous to yeast UBC4/5) (UBE2E3) mRNA
6731	19325	32129	1.43	9.0E-79	11430822	NT	Homo sapiens hypothetical protein FLJ11294 (FLJ11294), mRNA
7388	24781		0.98	9.0E-79	11424427	NT	Homo sapiens hypothetical protein FLJ20345 (FLJ20345), mRNA
7575	20091	32968	0.99	9.0E-79	11421735	NT	Homo sapiens cAMP response element-binding protein CRE-BPa (H. GS165L15.1), mRNA
7575	20091	32969	0.89	9.0E-79	11421735	NT	Homo sapiens cAMP response element-binding protein CRE-BPa (H. GS165L15.1), mRNA
7612	20125	33002	0.72	9.0E-79	D30658.1	NT	Human T-cell mRNA for glycyl tRNA synthetase, complete cds
8287	20828	33748	0.56	9.0E-79	11417260	NT	Homo sapiens threonyl-tRNA synthetase (TARS), mRNA
8287	20828	33749	0.56	9.0E-79	11417260	NT	Homo sapiens threonyl-tRNA synthetase (TARS), mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8093	21531	34460	7.08	9.0E-79	J02853.1	NT	Homo sapiens casein kinase II alpha subunit mRNA, complete cds
8093	21531	34461	7.08	9.0E-79	J02853.1	NT	Homo sapiens casein kinase II alpha subunit mRNA, complete cds
9302	21902	34851	0.61	9.0E-79	D87875.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
10267	22762	35749	0.59	9.0E-79	11438643	NT	Homo sapiens zinc finger protein 216 splice variant 1 (ZNF216) mRNA, complete cds
10316	22810	35803	2.32	9.0E-79	AF062346.1	NT	Homo sapiens zinc finger protein 216 splice variant 1 (ZNF216) mRNA, complete cds
10316	22810	35804	2.32	9.0E-79	AF062346.1	NT	Homo sapiens zinc finger protein 216 splice variant 1 (ZNF216) mRNA, complete cds
10946	23462	36484	2.73	9.0E-79	AY008273.1	NT	Homo sapiens TRAF6-regulated IKK activator 1 beta Uev1A mRNA, complete cds
11388	23840	36904	3.26	9.0E-79	11423827	NT	Homo sapiens suppressor of white apricot homolog 2 (SWAP2), mRNA
11388	23840	36905	3.26	9.0E-79	11423827	NT	Homo sapiens suppressor of white apricot homolog 2 (SWAP2), mRNA
12549	24654	30900	2.05	9.0E-79	11417877	NT	Homo sapiens gamma-glutamyltransferase 1 (GGT1), mRNA
3805	18405	28869	1.17	8.0E-79	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
11747	18035	30495	1.3	8.0E-79	8567387	NT	Homo sapiens period (Drosophila) homolog 3 (PER3), mRNA
3281	15802	28382	10.29	7.0E-79	BE618648.1	EST_HUMAN	601472766T1 NIH_MGC_88 Homo sapiens cDNA clone IMAGE:3875657 3'
11676	24095		2.07	6.0E-79	AA699829.1	EST_HUMAN	204604.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:462558 3' similar to TR:Q15408 Q15408 NEUTRAL PROTEASE LARGE SUBUNIT ;
11368	23820	36882	3.85	5.0E-79	AL163282.2	NT	Homo sapiens chromosome 21 segment HS21C082
5159	17728	30157	2.24	4.0E-79	BF210869.1	EST_HUMAN	601874522F1 NIH_MGC_54 Homo sapiens cDNA clone IMAGE:4101245 5'
335	12887	25474	2.46	3.0E-79	AF114488.1	NT	Homo sapiens intersectin short isoform (ITSN) mRNA, complete cds
1014	13624	26139	4.44	3.0E-79	AF232708.1	NT	Homo sapiens cell-line tsA201a chloride ion current inducer protein (Cln) gene, complete cds
3133	15747	28216	1.91	3.0E-79	U09410.1	NT	Human zinc finger protein ZNF131 mRNA, partial cds
5292	17854	30278	0.94	3.0E-79	AF114488.1	NT	Homo sapiens intersectin short isoform (ITSN) mRNA, complete cds
5292	17854	30279	0.94	3.0E-79	AF114488.1	NT	Homo sapiens intersectin short isoform (ITSN) mRNA, complete cds
5564	18195	30641	8.78	3.0E-79	AF110322.1	NT	Homo sapiens MSTP016 (MST016) mRNA, complete cds
5988	18520	31245	1.72	3.0E-79	AB020699.1	NT	Homo sapiens mRNA for KIAA0892 protein, partial cds
5922	18544	31270	1.01	3.0E-79	BE789470.1	EST_HUMAN	601482143F1 NIH_MGC_88 Homo sapiens cDNA clone IMAGE:3884554 5'
5922	18544	31271	1.01	3.0E-79	BE789470.1	EST_HUMAN	601482143F1 NIH_MGC_88 Homo sapiens cDNA clone IMAGE:3884554 5'
5942	18562	31291	3.6	3.0E-79	11426770	NT	Homo sapiens netrin 1 (NTN1), mRNA
5942	18562	31292	3.6	3.0E-79	11426770	NT	Homo sapiens netrin 1 (NTN1), mRNA
6843	19433	32248	0.76	3.0E-79	BE256893.1	EST_HUMAN	601112055F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3352885 5'
7120	19460	32275	3.07	3.0E-79	AB014520.1	NT	Homo sapiens mRNA for KIAA0820 protein, partial cds
7120	19460	32276	3.07	3.0E-79	AB014520.1	NT	Homo sapiens mRNA for KIAA0820 protein, partial cds
8105	20846	33555	1.58	3.0E-79	AF249273.1	NT	Homo sapiens Bcl-2-associated transcription factor short form mRNA, complete cds
8324	21838	34789	0.71	3.0E-79	10835036	NT	Homo sapiens tetrapeptide repeat domain 3 (TTC3), mRNA
10249	22744		0.62	3.0E-79	AV698115.1	EST_HUMAN	AV698115 GK Homo sapiens cDNA clone GKCAHE11 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10740	23285	36280	1.97	3.0E-79	AF249273.1	NT	Homo sapiens Bcl-2-associated transcription factor short form mRNA, complete cds
10740	23285	36281	1.97	3.0E-79	AF249273.1	NT	Homo sapiens Bcl-2-associated transcription factor short form mRNA, complete cds
309	12984		1.05	2.0E-79	H63129.1	EST_HUMAN	y4803.s1 Soares fetal liver spleen 1NLS Homo sapiens cDNA clone IMAGE:208541 3'
662	13286	25767	1.38	2.0E-79	BE370926.1	EST_HUMAN	601159415F2 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3511107 5'
963	13574	26090	0.94	2.0E-79	4757841	NT	Homo sapiens BCL2-like 2 (BCL2L2) mRNA
1020	13630	26145	0.91	2.0E-79	4885234	NT	Homo sapiens Gardner-Rasheed feline sarcoma viral (v-fgr) oncogene homolog (FGR) mRNA
1020	13630	26146	0.91	2.0E-79	4885234	NT	Homo sapiens Gardner-Rasheed feline sarcoma viral (v-fgr) oncogene homolog (FGR) mRNA
1073	13678		1.08	2.0E-79	AI523747.1	EST_HUMAN	th18107.x1 NCL CGAP_P28 Homo sapiens cDNA clone IMAGE:2118685 3'
1824	14413	26958	1.21	2.0E-79	7657024	NT	Homo sapiens Dickkopf gene 4 (DKK-4), mRNA
1824	14413	26959	1.21	2.0E-79	7657024	NT	Homo sapiens Dickkopf gene 4 (DKK-4), mRNA
1918	14503	27060	1.01	2.0E-79	7662255	NT	Homo sapiens KIAA0703 gene product (KIAA0703), mRNA
2193	14769	27341	10.76	2.0E-79	4585963	NT	Homo sapiens phosphodiesterase 6A, cGMP-specific, rod, alpha (PDE6A), mRNA
2193	14769	27342	10.76	2.0E-79	4585963	NT	Homo sapiens phosphodiesterase 6A, cGMP-specific, rod, alpha (PDE6A), mRNA
2352	14923	27498	2.42	2.0E-79	AF244138.1	NT	Homo sapiens hepatocellular carcinoma-associated antigen 88 (HCA88) mRNA, complete cds
2741	15296	27963	0.99	2.0E-79	AB023154.1	NT	Homo sapiens mRNA for KIAA0937 protein, partial cds
3985	16583	29054	0.65	2.0E-79	AF170492.1	NT	Homo sapiens chloride channel CLC4 (CLC4) mRNA, complete cds
4245	16833	29284	1.24	2.0E-79	AJ271408.1	NT	Homo sapiens mRNA for Fas-associated factor, FAF1 (Faf1 gene)
4800	17378	29828	0.62	2.0E-79	AL163206.2	NT	Homo sapiens chromosome 21 segment HS21C008
							EST:182826 Jurkat T-cells VI Homo sapiens cDNA 5' end similar to similar to C. elegans hypothetical protein, cosmid B0303.15
5851	18475		1.16	2.0E-79	AA312223.1	EST_HUMAN	
5901	18523	31248	0.9	2.0E-79	11181769	NT	Homo sapiens X transporter protein 3 (XT3), mRNA
6390	18993	31773	1.1	2.0E-79	AB020637.1	NT	Homo sapiens mRNA for KIAA0830 protein, partial cds
7040	18060	30482	0.96	2.0E-79	AF263613.1	NT	Homo sapiens membrane-associated calcium-independent phospholipase A2 gamma mRNA, complete cds
7219	19750	32605	1.76	2.0E-79	7382479	NT	Homo sapiens Rho GTPase activating protein 6 (ARHGAP6), transcript variant 4, mRNA
7219	19750	32606	1.76	2.0E-79	7382479	NT	Homo sapiens Rho GTPase activating protein 6 (ARHGAP6), transcript variant 4, mRNA
8044	20596	33492	1.22	2.0E-79	4506442	NT	Homo sapiens retinoblastoma-like 1 (p107) (RBL1) mRNA
8454	20994	33912	2.52	2.0E-79	11427428	NT	Homo sapiens hypothetical protein FLJ11008 (FLJ11008), mRNA
8701	21240	34163	0.55	2.0E-79	8923248	NT	Homo sapiens hypothetical protein FLJ20275 (FLJ20275), mRNA
8701	21240	34164	0.55	2.0E-79	8923248	NT	Homo sapiens hypothetical protein FLJ20275 (FLJ20275), mRNA
8934	21472	34391	0.99	2.0E-79	11432184	NT	Homo sapiens similar to ATPase, H ⁺ transporting, lysosomal (vacuolar proton pump) membrane sector associated protein M8-9 (H. sapiens) (LOC63961), mRNA
10004	22499	35488	1.94	2.0E-79	S72869.1	NT	H4(D10S170)=putative cytoskeletal protein [human, thyroid, mRNA, 3011 nt]
10004	22499	35489	1.94	2.0E-79	S72869.1	NT	H4(D10S170)=putative cytoskeletal protein [human, thyroid, mRNA, 3011 nt]

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10908	23427	36444	5.07	2.0E-79	BE064386.1	EST_HUMAN	RC4-BT0310-110300-015-f10 BT0310 Homo sapiens cDNA
10908	23427	36445	5.07	2.0E-79	BE064386.1	EST_HUMAN	RC4-BT0310-110300-015-f10 BT0310 Homo sapiens cDNA
11716	18033	30483	5.59	2.0E-79	7662357	NT	Homo sapiens KIAA0879 protein (KIAA0879), mRNA
11806	24181	31029	5.85	2.0E-79	AB020640.1	NT	Homo sapiens mRNA for KIAA0833 protein, partial cds
12038	24326	30994	2.81	2.0E-79	11418322	NT	Homo sapiens cadherin EGF LAG seven-pass G-type receptor 1 (CELSR1), mRNA
6701	24766		3.27	1.0E-79	BF363071.1	EST_HUMAN	MRO-NN0087-260600-017-b10 NN0087 Homo sapiens cDNA
8187	20728	33640	0.74	1.0E-79	BE394211.1	EST_HUMAN	601311517F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3632809 5'
11487	29836	37008	2.11	1.0E-79	BF087405.1	EST_HUMAN	QV2-HT0540-120900-358-a05 HT0540 Homo sapiens cDNA
11834	25021		1.84	1.0E-79	AI460115.1	EST_HUMAN	ar79a04.x1 Barstead colon HPLRB7 Homo sapiens cDNA clone IMAGE:2151438 3'
3180	15793	28284	5.7	9.0E-80	AA725848.1	EST_HUMAN	ai23605.s1 Soares_testis_NHT Homo sapiens cDNA clone 1343648 3'
3180	15793	28265	5.7	9.0E-80	AA725848.1	EST_HUMAN	ai23605.s1 Soares_testis_NHT Homo sapiens cDNA clone 1343648 3'
9826	22422	35398	1.33	9.0E-80	BE788603.1	EST_HUMAN	601581652F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3936061 5'
11156	23663	36708	11.44	9.0E-80	11433924	NT	Homo sapiens solute carrier family 7 (cationic amino acid transporter, y ⁺ system), member 8 (SLC7A8), mRNA
11156	23663	36709	11.44	9.0E-80	11433924	NT	Homo sapiens solute carrier family 7 (cationic amino acid transporter, y ⁺ system), member 8 (SLC7A8), mRNA
3662	18264		1.19	8.0E-80	U94387.1	NT	Homo sapiens Y chromosome spermatogenesis candidate protein (RBM) pseudogene mRNA, partial cds
7600	20113	32989	2.92	8.0E-80	11422647	NT	Homo sapiens KIAA0724 gene product (KIAA0724), mRNA
7600	20113	32990	2.92	8.0E-80	11422647	NT	Homo sapiens KIAA0724 gene product (KIAA0724), mRNA
9323	21837	34787	1.07	8.0E-80	6005921	NT	Homo sapiens triple functional domain (P TPRF interacting) (TRIO), mRNA
9323	21837	34788	1.07	8.0E-80	6005921	NT	Homo sapiens triple functional domain (P TPRF interacting) (TRIO), mRNA
933	13548	26063	1.84	6.0E-80	AI422197.1	EST_HUMAN	ff58d02.x1 NCI_CGAP_Bn23 Homo sapiens cDNA clone IMAGE:2103459 3' similar to SW:NUEM_HUMAN Q16795 NADH-UBIQUINONE OXIDOREDUCTASE 39 KD SUBUNIT PRECURSOR :
1885	14277	26810	2.28	6.0E-80	U84988.1	NT	Homo sapiens NRD convertase mRNA, complete cds
2337	14908	27479	2.88	6.0E-80	6631094	NT	Homo sapiens minichromosome maintenance deficient (S. cerevisiae) 3 (MCM3), mRNA
2337	14908	27480	2.88	6.0E-80	6631094	NT	Homo sapiens minichromosome maintenance deficient (S. cerevisiae) 3 (MCM3), mRNA
4372	16959	29403	0.98	6.0E-80	AB032981.1	NT	Homo sapiens mRNA for KIAA1155 protein, partial cds
4372	16959	29404	0.98	6.0E-80	AB032981.1	NT	Homo sapiens malate dehydrogenase 2, NAD (mitochondrial) (MDH2), mRNA
5969	18590	31325	2.15	6.0E-80	11421462	NT	Homo sapiens mRNA for dynein heavy chain (DNAH9 gene)
6226	18835	31608	3.16	6.0E-80	AJ404468.1	NT	Homo sapiens lubby like protein 3 (TULP3), mRNA
6376	18980	31759	4.09	6.0E-80	11436736	NT	Homo sapiens KIAA0941 protein (KIAA0941), mRNA
6418	19021		0.88	6.0E-80	7662393	NT	Homo sapiens KIAA0941 protein (KIAA0941), mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6464	19065	31850	0.84	6.0E-80	M18533.1	NT	Homo sapiens dystrophin (DMD) mRNA, complete cds
8758	21297	34217	2.43	6.0E-80	11528464	NT	Homo sapiens G protein-coupled receptor 51 (GPR51), mRNA
8758	21297	34218	2.43	6.0E-80	11528464	NT	Homo sapiens G protein-coupled receptor 51 (GPR51), mRNA
8948	21487	34409	1.6	6.0E-80	AL163301.2	NT	Homo sapiens chromosome 21 segment HS21C101
9281	21807	34759	0.88	6.0E-80	AF161495.1	NT	Homo sapiens HSPC146 mRNA, complete cds
9775	22273	35258	1.49	6.0E-80	U20211.1	NT	Human core photoreceptor cGMP-phosphodiesterase alpha subunit gene, exon 21
10820	23341	36356	2.68	6.0E-80	11427366	NT	Homo sapiens brefeldin A-inhibited guanine nucleotide-exchange protein 1 (BIG1), mRNA
11103	23813	36653	22.81	6.0E-80	AF226730.1	NT	Homo sapiens Cyt19 mRNA, complete cds
11593	24036	37105	1.93	6.0E-80	AF102265.1	NT	Homo sapiens N-acetylglucosamine-phosphate mutase mRNA, complete cds
11817	24896		1.84	6.0E-80	AF240786.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
12019	24316		5.01	6.0E-80	AB029900.1	NT	Homo sapiens GST gene for cerebroside sulfotransferase, exon 1, 2, 3, 4, 5
12543	25028		1.95	6.0E-80	AJ133127.1	NT	Homo sapiens mRNA for sodium-glucose cotransporter (SGLT2 gene)
614	13241	25716	2.83	5.0E-80	4506228	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, non-ATPase, 3 (PSMD3) mRNA
868	13483	25998	1.9	5.0E-80	AF108830.1	NT	Homo sapiens serine-threonine protein kinase (MNBH) mRNA, complete cds
868	13483	25998	1.9	5.0E-80	AF108830.1	NT	Homo sapiens serine-threonine protein kinase (MNBH) mRNA, complete cds
1231	13830		1.16	5.0E-80	X91847.1	NT	H. sapiens next gene (exon 12)
1503	14095		2.88	5.0E-80	AL163283.2	NT	Homo sapiens chromosome 21 segment HS21C083
2399	14967	27540	1.08	5.0E-80	U89358.1	NT	Human (3)mb1 protein homolog mRNA, complete cds
2474	15041	27609	2.56	5.0E-80	AB037855.1	NT	Homo sapiens mRNA for KIAA1434 protein, partial cds
2820	15372	27941	2.67	5.0E-80	4504292	NT	Homo sapiens H3 histone family, member J (H3FJ) mRNA
4112	16706	29160	0.93	5.0E-80	AB019038.1	NT	Homo sapiens HMT-1 mRNA for beta-1,4 mannosyltransferase, complete cds
4112	16706	29161	0.93	5.0E-80	AB019038.1	NT	Homo sapiens HMT-1 mRNA for beta-1,4 mannosyltransferase, complete cds
5089	17682	30102	1.29	5.0E-80	AL163288.2	NT	Homo sapiens chromosome 21 segment HS21C068
8298	20839	33760	1.04	5.0E-80	9910293	NT	Mus musculus keratin complex 2, gene 6g (Krt2-6g), mRNA
9182	21759	34705	15.52	4.0E-80	F25915.1	EST_HUMAN	HSPD13155 HM3 Homo sapiens cDNA clone s4000045F03
233	12893		11.18	3.0E-80	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
5034	17608		6.93	3.0E-80	BE817485.1	EST_HUMAN	QV4-BN0283-040800-241-g10 BN0283 Homo sapiens cDNA
5986	18606	31340	2.04	3.0E-80	A0891675.1	EST_HUMAN	cc23e12.x1 Soares NSF_F8_9W_OT_PA_S1 Homo sapiens cDNA clone IMAGE:1567054 3' similar to
1833	14421	26971	6.34	2.0E-80	R5321.1	EST_HUMAN	TR:O35780 O35790 PIG-L;
1900	14485	27046	1.4	2.0E-80	A1444921.1	EST_HUMAN	y956a08.1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:38060 5'
2100	14679	27247	5.8	2.0E-80	AL043116.2	EST_HUMAN	RET487 subtracted retina cDNA library Homo sapiens cDNA clone RET487
6393	18996	31775	0.71	2.0E-80	A923972.1	EST_HUMAN	DKFZp434D1323_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434D1323 5'
							wn49c10.x1 NCI_OGAP_Lut19 Homo sapiens cDNA clone IMAGE:2448786 3'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6393	18996	31776	0.71	2.0E-80	A1923972.1	EST_HUMAN	w149c10.x1 NCI_CGAP_Lu19 Homo sapiens cDNA clone IMAGE:2448786 3'
6897	19631	32469	1.08	2.0E-80	AA582952.1	EST_HUMAN	m80d01.s1 NCI_CGAP_Cc9 Homo sapiens cDNA clone IMAGE:1090177 3'
6893	19491	32312	1.69	2.0E-80	11421830	NT	Homo sapiens Golgi transport complex protein (80 kDa) (GTC90), mRNA
7298	19828	32685	1	2.0E-80	T75215.1	EST_HUMAN	y88f12.r1 Soares infant brain 1NIB Homo sapiens cDNA clone IMAGE:22851 5' similar to
9086	21622	34558	1.25	2.0E-80	AW964270.1	EST_HUMAN	SPK1CR_XENLA P08802 KERATIN, TYPE I CYTOSKELETAL ENDO B:
9683	22182	35158	1.13	2.0E-80	AJ007379.1	NT	EST376343 MAGE resequences, MAGH Homo sapiens cDNA
10748	23272	36287	7.28	2.0E-80	AA393362.1	EST_HUMAN	Homo sapiens GGT gene, exon 6
362	13011		1.44	1.0E-80	AL163303.2	NT	z70f12.r1 Soares, testis_NHT Homo sapiens cDNA clone IMAGE:727727 5' similar to TR.G191315
832	13449	25956	1.39	1.0E-80	AF231920.1	NT	G191315 ANDROGEN-DEPENDENT EXPRESSED PROTEIN.:
1987	14579		3.73	1.0E-80	A1732656.1	EST_HUMAN	Homo sapiens chromosome 21 unknown mRNA
4945	17520	29662	0.71	1.0E-80	N89520.1	EST_HUMAN	m01f12.x5 NCI_CGAP_Cc9 Homo sapiens cDNA clone IMAGE:1076495 3' similar to contains OFR.11 OFR
5530	18162		6.77	1.0E-80	BE386615.1	EST_HUMAN	repetitive element 1:
6128	18741	31494	5.9	1.0E-80	L10347.1	NT	z339g07.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:294972 5' similar to contains
6824	19221	32026	1.57	1.0E-80	5174540	NT	Alu repetitive element:
7258	19786	32642	1.39	1.0E-80	AJ224172.1	NT	601274305F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3615433 5'
7574	20090	32868	2.64	1.0E-80	A1948731.1	EST_HUMAN	Human pro-alpha1 type II collagen (COL2A1) gene exons 1-54, complete cds
7574	20090	32967	2.64	1.0E-80	A1948731.1	EST_HUMAN	Homo sapiens malate dehydrogenase 2, NAD (mitochondrial) (MDH2), nuclear gene encoding mitochondrial
8173	20714	33630	1.25	1.0E-80	11421211	NT	protein, mRNA
8634	21173	34091	0.96	1.0E-80	11421211	NT	Homo sapiens mRNA for lipophilin B
8634	21173	34092	0.96	1.0E-80	11421211	NT	wq25c05.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2472296 3'
9209	21726	34968	1.79	1.0E-80	AF245219.1	NT	wq25c05.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2472296 3'
9209	21726	34969	1.79	1.0E-80	AF245219.1	NT	Homo sapiens protein tyrosine phosphatase, receptor type, A (PTPRA), mRNA
10323	22817	35813	0.93	1.0E-80	D63479.2	NT	Homo sapiens protein tyrosine phosphatase, receptor type, A (PTPRA), mRNA
10531	23068	36080	2.64	1.0E-80	11641276	NT	Homo sapiens probable mannose binding C-type lectin DC-SIGNR mRNA, complete cds
10531	23068	36081	2.64	1.0E-80	11641276	NT	Homo sapiens probable mannose binding C-type lectin DC-SIGNR mRNA, complete cds
12091	24359	30967	2.04	1.0E-80	11417901	NT	Homo sapiens mRNA for KIAA0145 protein, partial cds
10564	23100	36113	3.56	8.0E-81	AJ251752.1	EST_HUMAN	Homo sapiens similar to rat myomegalin (LOC84182), mRNA
10564	23100	36114	3.56	8.0E-81	AJ251752.1	EST_HUMAN	Homo sapiens similar to rat myomegalin (LOC84182), mRNA
11033	23547	36562	6.13	8.0E-81	BE394525.1	EST_HUMAN	Homo sapiens meningioma (disrupted in balanced translocation) 1 (MN1), mRNA

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Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7299	19827	32886	3.19	7.0E-81	AI822115.1	EST_HUMAN	zb91c08.x5 Soares_fetal_lung_NbHL19W Homo sapiens cDNA clone IMAGE:299918 3'
4476	17061	29510	4.95	6.0E-81	BE256829.1	EST_HUMAN	601111970F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3352840 5'
4476	17061	29511	4.95	6.0E-81	BE256829.1	EST_HUMAN	601111970F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3352840 5'
5487	18121	30528	1.71	8.0E-81	4501848	NT	Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 3 (ABCA3), mRNA
5487	18121	30529	1.71	8.0E-81	4501848	NT	Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 3 (ABCA3), mRNA
9162	21697	34841	1.22	6.0E-81	AA360017.1	EST_HUMAN	EST69129 Fetal lung II Homo sapiens cDNA 5' end
12240	24453	30955	2.16	6.0E-81	BF679022.1	EST_HUMAN	602153666F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4294601 5'
12240	24453	30956	2.16	6.0E-81	BF679022.1	EST_HUMAN	602153666F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4294601 5'
2258	14832	27410	2.66	5.0E-81	BE268042.1	EST_HUMAN	601125505F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3345480 5'
8351	20892	33813	1.42	5.0E-81	AB007923.1	NT	Homo sapiens mRNA for KIAA0454 protein, partial cds
8351	20892	33814	1.42	5.0E-81	AB007923.1	NT	Homo sapiens mRNA for KIAA0454 protein, partial cds
9566	22066	35025	1.28	5.0E-81	M60316.1	NT	Human transforming growth factor-beta (tgf-beta) mRNA, complete cds
9566	22066	35026	1.28	5.0E-81	M60316.1	NT	Human transforming growth factor-beta (tgf-beta) mRNA, complete cds
11455	23905	36972	2.66	5.0E-81	9506634	NT	Homo sapiens hypothetical protein (FLJ11045), mRNA
238	12898	25381	1.3	4.0E-81	AF252257.1	NT	Homo sapiens CRP2 binding protein mRNA, partial cds
731	13351	25846	1.34	4.0E-81	AI521435.1	EST_HUMAN	th60e12.x1 NCI_CGAP_Ov23 Homo sapiens cDNA clone IMAGE:2122702 3' similar to TR:Q85560 Q85560
3206	15818	28294	4.76	4.0E-81	AB037768.1	NT	Homo sapiens mRNA for KIAA1345 protein, partial cds
3690	16291	28760	0.98	4.0E-81	AW004608.1	EST_HUMAN	ws90h03.x1 NCI_CGAP_Co3 Homo sapiens cDNA clone IMAGE:2505269 3' similar to TR:O43815 O43815
4240	16828	29277	2.39	4.0E-81	AF263306.1	NT	STRIATIN ;
4240	16828	29278	2.39	4.0E-81	AF263306.1	NT	Homo sapiens rab3 interacting protein variant 2 mRNA, partial cds
4481	17066	29516	1.08	4.0E-81	8923209	NT	Homo sapiens rab3 interacting protein variant 2 mRNA, partial cds
7321	19848	32708	0.86	4.0E-81	4757893	NT	Homo sapiens hypothetical protein FLJ20220 (FLJ20220), mRNA
8229	20770	33689	1.71	4.0E-81	X09899.1	NT	Homo sapiens calcium channel, voltage-dependent, L type, alpha 2/delta subunit (CACNA2) mRNA
8482	21021	33936	3.39	4.0E-81	U20197.1	NT	Human mRNA for amyloid A4(751) protein
8482	21021	33937	3.39	4.0E-81	U20197.1	NT	Human cone photoreceptor cGMP-phosphodiesterase alpha' subunit gene, exons 2 and 3
9153	21688	34632	4.78	4.0E-81	AB018001.1	NT	Human cone photoreceptor cGMP-phosphodiesterase alpha' subunit gene, exons 2 and 3
10012	22507	35498	1.79	4.0E-81	11425281	NT	Homo sapiens mRNA for Death-associated protein kinase 2, complete cds
10075	22570	35564	0.57	4.0E-81	11439065	NT	Homo sapiens ligase I, DNA, ATP-dependent (LIG1), mRNA
10075	22570	35565	0.57	4.0E-81	11439065	NT	Homo sapiens acyl-Coenzyme A dehydrogenase family, member 8 (ACAD8), mRNA
11063	23575	36612	2.85	4.0E-81	4759085	NT	Homo sapiens acyl-Coenzyme A dehydrogenase family, member 8 (ACAD8), mRNA
11063	23575	36613	2.85	4.0E-81	4759085	NT	Homo sapiens vesicle trafficking protein sec22b (SEC22B) mRNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11708	24981	30834	11.8	4.0E-81	11417882	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
11708	24981	30835	11.8	4.0E-81	11417882	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
12277	24481	30938	2.13	4.0E-81	11417871	NT	Homo sapiens beta-ureidopropionase (LOC51733), mRNA
12277	24481	30939	2.13	4.0E-81	11417871	NT	Homo sapiens beta-ureidopropionase (LOC51733), mRNA
12430	24572	30912	4.2	4.0E-81	11417974	NT	Homo sapiens transcobalamin II; macrocytic anemia (TCN2), mRNA
1310	13904	28422	9.81	3.0E-81	Y18000.1	NT	Homo sapiens NF2 gene
1310	13904	28423	9.81	3.0E-81	Y18000.1	NT	Homo sapiens NF2 gene
2409	14977	27551	1.66	3.0E-81	AF077188.1	NT	Homo sapiens cullin 4A (CUL4A) mRNA, complete cds
3020	15638	28112	5.8	3.0E-81	4508280	NT	Homo sapiens pleiotrophin (heparin binding growth factor 8, neurite growth-promoting factor 1) (PTN) mRNA
3020	15638	28113	5.8	3.0E-81	4508280	NT	Homo sapiens pleiotrophin (heparin binding growth factor 8, neurite growth-promoting factor 1) (PTN) mRNA
5143	17714		2.95	3.0E-81	AL163283.2	NT	Homo sapiens chromosome 21 segment H521C083
2859	15478	27953	2.07	2.0E-81	BE784638.1	EST_HUMAN	601474072F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3877121 5'
2859	15478	27954	2.07	2.0E-81	BE784638.1	EST_HUMAN	601474072F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3877121 5'
3841	18440	28902	0.75	2.0E-81	AW611542.1	EST_HUMAN	hg85c01.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2952384 3'
12591	18440	28902	2.77	2.0E-81	AW611542.1	EST_HUMAN	hg85c01.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2952384 3'
1488	14060	28595	0.92	1.0E-81	W26539.1	EST_HUMAN	3393 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA
4813	17198	29842	1.81	1.0E-81	AA040370.1	EST_HUMAN	zh45h09.r1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:485825 5' similar to PIR:S52437 S52437 ODP-diacylglycerol synthase - fruit fly
4750	17331	29774	8.65	1.0E-81	BE047986.1	EST_HUMAN	tz45c04.v1 NCI_CGAP_Bn52 Homo sapiens cDNA clone IMAGE:2281528 5'
5049	17622	30067	1.14	1.0E-81	AW182428.1	EST_HUMAN	yx42a03.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2659852 3'
5448	18017	37139	3.85	1.0E-81	U87928.1	NT	Homo sapiens aconitase hydratase (ACO2) gene, exon 3
5556	18188	30803	3.58	1.0E-81	11432868	NT	Homo sapiens polymerase (DNA directed), gamma (POLG), mRNA
5556	18188	30804	3.58	1.0E-81	11432868	NT	Homo sapiens polymerase (DNA directed), gamma (POLG), mRNA
5693	18319	30818	0.77	1.0E-81	AA255589.1	EST_HUMAN	zr85d08.r1 Soares_NbHMPu_S1 Homo sapiens cDNA clone IMAGE:682475 5' similar to SW:PR12_HUMAN
5835	18459	31180	3.92	1.0E-81	U52351.1	NT	P49843 DNA PRIMASE 58 KD SUBUNIT
5835	18459	31181	3.92	1.0E-81	U52351.1	NT	Homo sapiens arm-repeat protein NPRAP/neurotrophin (GTNND2) mRNA, partial cds
6295	18903	31874	1.82	1.0E-81	BF674641.1	EST_HUMAN	Homo sapiens arm-repeat protein NPRAP/neurotrophin (GTNND2) mRNA, partial cds
6898	19428	32242	0.73	1.0E-81	AJ133286.1	NT	602137864F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4274535 5'
7748	20258	33151	7.93	1.0E-81	11432868	NT	Homo sapiens caveolin-1/2 locus, Contig1, D7S522, genes CAV2 (exons 1, 2a, and 2b), CAV1 (exons 1 and 2)
7792	20270	33168	0.72	1.0E-81	AJ250408.1	NT	Homo sapiens polymerase (DNA directed), gamma (POLG), mRNA
							Homo sapiens GLI3 gene for GLI3 protein

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Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9891	22180	35163	13.75	1.0E-81	BE958278.1	EST_HUMAN	601645051F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:3930228 5'
9891	22180	35164	13.75	1.0E-81	BE958278.1	EST_HUMAN	601645051F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:3930228 5'
9879	22376	35353	4.13	1.0E-81	BE584367.1	EST_HUMAN	601343180F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3685483 5'
							sc14d06.s1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone IMAGE:856427 3' similar to SW:YB36_YEAST P38128 HYPOTHETICAL 60.5 KD PROTEIN IN RPS101-RPS13 INTERGENIC REGION.
10014	22509	35500	1.18	1.0E-81	AA630784.1	EST_HUMAN	
10016	22511	35502	2.64	1.0E-81	BE744545.1	EST_HUMAN	601577339F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3838280 5'
10018	22511	35503	2.64	1.0E-81	BE744545.1	EST_HUMAN	601577339F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3838280 5'
10402	22896	35892	1.47	1.0E-81	AW897550.1	EST_HUMAN	CM3-NN0059-140400-147-a12 NN0059 Homo sapiens cDNA
10867	23482	36508	2.02	1.0E-81	AW944986.1	EST_HUMAN	MR0-CT0006-250598-019 CT0006 Homo sapiens cDNA
10867	23482	36509	2.02	1.0E-81	AW844986.1	EST_HUMAN	MR0-CT0006-250598-019 CT0006 Homo sapiens cDNA
10871	23486	36514	1.57	1.0E-81	AW798167.1	EST_HUMAN	RC3-UM0046-280200-011-a08 UM0046 Homo sapiens cDNA
10871	23486	36515	1.57	1.0E-81	AW798167.1	EST_HUMAN	RC3-UM0046-280200-011-a08 UM0046 Homo sapiens cDNA
11152	18027	30489	2.07	1.0E-81	AW960658.1	EST_HUMAN	EST372729 MAGC rescue sequences, MAGF Homo sapiens cDNA
11398	23850	38916	2.34	1.0E-81	BF204253.1	EST_HUMAN	601867714F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4110459 5'
11920	24256	31012	3.39	1.0E-81	11418138	NT	Homo sapiens phorbol (similar to apolipoprotein B mRNA editing protein) (DJ742C19.2), mRNA
14	12693	25149	13.13	8.0E-82	AF161406.1	NT	Homo sapiens HSPC288 mRNA, partial cds
111	12693	25149	6.9	8.0E-82	AF161406.1	NT	Homo sapiens HSPC288 mRNA, partial cds
285	12841	25427	1.89	8.0E-82	U08988.1	NT	Human CRFB4 gene, partial cds
847	13463	25971	2.2	8.0E-82	U08988.1	NT	Human CRFB4 gene, partial cds
920	13533	26051	1.5	8.0E-82	U08988.1	NT	Human CRFB4 gene, partial cds
1537	14128	26665	1.12	8.0E-82	AB037748.1	NT	Homo sapiens mRNA for KIAA1327 protein, partial cds
1697	14290	28826	1.42	8.0E-82	6715601	NT	Homo sapiens glutathione peroxidase 5 (epididymal androgen-related protein) (GPX5), transcript variant 2, mRNA
4328	16914	29358	0.77	8.0E-82	8923432	NT	Homo sapiens hypothetical protein FLJ20461 (FLJ20461), mRNA
1499	14091		1.45	7.0E-82	BF035327.1	EST_HUMAN	601458531F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3862086 5'
2794	15347	27816	1.21	7.0E-82	AU144050	EST_HUMAN	AU144050 HEMBA1 Homo sapiens cDNA clone HEMBA1000752 3'
12395	24555		1.37	7.0E-82	AA515512.1	EST_HUMAN	16881.1.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:925196 3'
1710	14303	28840	20.15	4.0E-82	AF081484.1	NT	Homo sapiens alpha-tubulin isoform 1 mRNA, complete cds
5688	18314	30812	0.83	4.0E-82	BF351691.1	EST_HUMAN	QV2-HT0540-120900-382-f08 HT0540 Homo sapiens cDNA
5688	18314	30813	0.83	4.0E-82	BF351691.1	EST_HUMAN	QV2-HT0540-120900-382-f08 HT0540 Homo sapiens cDNA
							wp75608.x1 NCL_CGAP_Brn25 Homo sapiens cDNA clone IMAGE:2467824 3' similar to TR:O75276
11563	24010	37080	5.53	4.0E-82	AI937300.1	EST_HUMAN	O75276 PKD1;
12179	24415		5.98	4.0E-82	AF028701.2	NT	Homo sapiens presenilin-1 gene, exons 1 and 2

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Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
289	12955	25444	14.77	3.0E-82	4502168	NT	Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA
732	13352	25847	2.11	3.0E-82	BE005705.1	EST_HUMAN	RC2-BN0120-010400-013-02 BN0120 Homo sapiens cDNA
820	13437	25944	8.87	3.0E-82	5174702	NT	Homo sapiens transforming growth factor beta-activated kinase-binding protein 1 (TAB1), mRNA
803	13517	26035	3.37	3.0E-82	4502168	NT	Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA
1089	13704		39.08	3.0E-82	AA725848.1	EST_HUMAN	a23a05.s1 Soares_testis_NHT Homo sapiens cDNA clone 1343648 3'
1398	13983	26522	1.11	3.0E-82	AW875073.1	EST_HUMAN	RC6-PT0001-180100-021-B02 PT0001 Homo sapiens cDNA
1515	14107	26643	2.15	3.0E-82	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
1945	14529	27085	1.59	3.0E-82	BE813232.1	EST_HUMAN	RC1-BN0005-260700-018-g04 BN0005 Homo sapiens cDNA
2050	14631	27202	1.18	3.0E-82	4501922	NT	Homo sapiens adenylate cyclase activating polypeptide 1 (pituitary) receptor type I (ADCYAP1R1) mRNA
3310	15921		2.54	3.0E-82	5453811	NT	Homo sapiens neurotrophic tyrosine kinase, receptor, type 2 (NTRK2) mRNA
5047	17620	30065	0.92	3.0E-82	AA135679.1	EST_HUMAN	zn83b04.r1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone IMAGE:565711 5' similar to SW:PAGT_BOVIN_Q07537 POLYPEPTIDE N-ACETYL GALACTOSAMINYL TRANSFERASE
8093	20834	33546	2.5	3.0E-82	11425205	NT	Homo sapiens ankyrin-like with transmembrane domains 1 (ANKTM1), mRNA
8491	21030	33949	0.82	3.0E-82	11432889	NT	Homo sapiens contactin 6 (CNTN6), mRNA
8491	21030	33950	0.82	3.0E-82	11432889	NT	Homo sapiens contactin 6 (CNTN6), mRNA
9738	22236	35215	5.16	3.0E-82	AB029000.1	NT	Homo sapiens mRNA for KIAA1077 protein, partial cds
9738	22236	35216	5.16	3.0E-82	AB029000.1	NT	Homo sapiens mRNA for KIAA1077 protein, partial cds
623	13250	25723	2.46	2.0E-82	AB023216.1	NT	Homo sapiens mRNA for KIAA0999 protein, partial cds
623	13250	25724	2.46	2.0E-82	AB023216.1	NT	Homo sapiens mRNA for KIAA0999 protein, partial cds
1724	14315	26857	1.52	2.0E-82	AL046360.1	EST_HUMAN	DKFZp434M117_r1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434M117 5'
3637	16436	26898	1.47	2.0E-82	M66878.1	NT	H sapiens plasminogen-apolipoprotein (a) gene family, exon for 1st kringle 4 repeat
3913	16511	26973	1.03	2.0E-82	D67875.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
4095	16690	29148	0.62	2.0E-82	U76833.1	NT	Human integral membrane serine protease Sepsase mRNA, complete cds
4317	16903	29347	0.66	2.0E-82	4504116	NT	Homo sapiens glutamate receptor, ionotropic, kainate 1 (GRIK1) mRNA
4658	17238	29693	1.38	2.0E-82	AB029019.1	NT	Homo sapiens mRNA for KIAA1086 protein, partial cds
4658	17238	29694	1.38	2.0E-82	AB029019.1	NT	Homo sapiens mRNA for KIAA1086 protein, partial cds
4995	17569	30013	2.59	2.0E-82	AF045555.1	NT	Homo sapiens wbscr1 (WBSGR1) and wbscr5 (WBSGR5) genes, complete cds, alternatively spliced and replication factor C subunit 2 (RFC2) gene, complete cds
5239	17803	30223	1.36	2.0E-82	4507580	NT	Homo sapiens tumor necrosis factor receptor superfamily, member 5 (TNFRSF5) mRNA
5239	17803	30224	1.36	2.0E-82	4507580	NT	Homo sapiens tumor necrosis factor receptor superfamily, member 5 (TNFRSF5) mRNA

Table 4

Single Exon Probes Expressed In Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5320	17882	30301	1.3	2.0E-82	4502508	NT	Homo sapiens complement component 5 (C5) mRNA
5662	18289	30767	3.76	2.0E-82	AB018270.1	NT	Homo sapiens mRNA for KIAA0727 protein, partial cds
6322	18929	31705	4.77	2.0E-82	AF234882.1	NT	Homo sapiens FAM4A1 splice variant a (FAM4A1) mRNA, complete cds
7673	25121		1.02	2.0E-82	A1476426.1	EST_HUMAN	hm21g05.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2157272 3'
7771	20280	33177	0.71	2.0E-82	8923130	NT	Homo sapiens hypothetical protein FLJ20128 (FLJ20128), mRNA
8247	20788	33707	1.82	2.0E-82	11321570	NT	Homo sapiens sili (Drosophila) homolog 3 (SLIT3), mRNA
10018	22513	35505	1.45	2.0E-82	Y08032.1	NT	Human endogenous retrovirus-K, LTR U5 and gag gene
10018	22513	35506	1.45	2.0E-82	Y08032.1	NT	Human endogenous retrovirus-K, LTR U5 and gag gene
11149	23657	36698	1.95	2.0E-82	11417191	NT	Homo sapiens leucylcystinyl aminopeptidase (LNPEP), mRNA
11149	23657	36700	1.95	2.0E-82	11417191	NT	Homo sapiens leucylcystinyl aminopeptidase (LNPEP), mRNA
11155	23662	36707	2.35	2.0E-82	11417105	NT	Homo sapiens 3-hydroxy-3-methylglutaryl-Coenzyme A reductase (HMGCR), mRNA
11188	23693	36741	8.98	2.0E-82	U80736.1	NT	Homo sapiens CAGF9 mRNA, partial cds
11188	23693	36742	8.98	2.0E-82	U80736.1	NT	Homo sapiens CAGF9 mRNA, partial cds
11737	24140		4.92	2.0E-82	N94950.1	EST_HUMAN	zb31d10.s1 Soares_parathyroid_tumor_1NFLS S1 Homo sapiens cDNA clone IMAGE:305203 3'
12299	24496		2.45	2.0E-82	AA011278.1	EST_HUMAN	z01g09.r1 Soares_fetal_liver_spleen_1NFLS S1 Homo sapiens cDNA clone IMAGE:429568 5'
618	13245	25718	1.59	1.0E-82	11545921	NT	Homo sapiens melanoma differentiation associated protein-5 (MDA5), mRNA
1250	13847		1.25	1.0E-82	BE885106.1	EST_HUMAN	601510859F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3912207 5'
1329	13923	26443	2.7	1.0E-82	BE064388.1	EST_HUMAN	RC4-BT0310-110300-015-f10 BT0310 Homo sapiens cDNA
1330	13924	26444	0.84	1.0E-82	AB011110.2	NT	Homo sapiens mRNA for KIAA0538 protein, partial cds
8872	21411	34334	1.31	1.0E-82	AB037838.1	NT	Homo sapiens mRNA for KIAA1417 protein, partial cds
9571	22071	35032	0.48	1.0E-82	AB014562.1	NT	Homo sapiens mRNA for KIAA0662 protein, partial cds
10143	22638		1.19	1.0E-82	BF515938.1	EST_HUMAN	UI-H-BW1-acc-f-03-0-UI.s1 NCI_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3084053 3'
10624	23156	36169	2.41	1.0E-82	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
10887	23408	36425	1.55	1.0E-82	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
8649	21188	34106	4.39	9.0E-83	BF672220.1	EST_HUMAN	602160403F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4291561 5'
10175	22870	35864	0.78	9.0E-83	BE253347.1	EST_HUMAN	601117160F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3357734 5'
1459	14051	26583	4.53	8.0E-83	BE383973.1	EST_HUMAN	601273346F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3614362 5'
1721	15394	26852	2.5	8.0E-83	N66951.1	EST_HUMAN	ze48f12.s1 Soares_fetal_liver_spleen_1NFLS Homo sapiens cDNA clone IMAGE:295823 3'
1401	13965	26523	1	7.0E-83	AW385526.1	EST_HUMAN	QV4-LT0016-271299-088-h11 LT0016 Homo sapiens cDNA
2890	15507		1.75	7.0E-83	AA584655.1	EST_HUMAN	no12h01.s1 NCI_CGAP_Phe1 Homo sapiens cDNA clone IMAGE:1100497 3' similar to contains Alu repetitive element
4940	17515		6.94	7.0E-83	BF221813.1	EST_HUMAN	7p37a07.x1 NCI_CGAP_P28 Homo sapiens cDNA clone IMAGE:3647893 3' similar to TR:Q9Y316 Q9Y316
6202	18812	31582	0.69	7.0E-83	11426657	NT	Homo sapiens KIAA0100 gene product (KIAA0100), mRNA

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428	13061	25555	3.97	6.0E-83	M33320.1	NT	Human platelet Glycoprotein IIb (GPIIb) gene, exons 2-29
1822	14411	28956	2.07	6.0E-83	AW573088.1	EST_HUMAN	h31h03.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2933525 3' similar to SW:YBEB_HAEIN P44471 HYPOTHETICAL PROTEIN HI0034. ;
3087	15702		0.81	6.0E-83	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
3619	16222	28700	1.18	6.0E-83	11430241	NT	Homo sapiens hypodermal protein FLJ10379 (FLJ10379), mRNA
5497	18131	30539	2.35	6.0E-83	4507868	NT	Homo sapiens VAMP (vesicle-associated membrane protein)-associated protein A (33kD) (VAPA) mRNA, and translated products
6174	18785	31553	1.18	6.0E-83	AJ010770.1	NT	Homo sapiens hyperion gene, exons 1-50
7513	20034	32900	1.98	6.0E-83	11420204	NT	Homo sapiens mel proto-oncogene (hepatocyte growth factor receptor) (MET), mRNA
9594	22094	35058	3.97	6.0E-83	4505314	NT	Homo sapiens myomesin (M-protein) 2 (185kD) (MYOM2), mRNA
9884	22183	35157	2.77	6.0E-83	11430647	NT	Homo sapiens pre-mRNA splicing factor similar to S. cerevisiae Prp18 (PRP18), mRNA
9884	22183	35158	2.77	6.0E-83	11430647	NT	Homo sapiens pre-mRNA splicing factor similar to S. cerevisiae Prp18 (PRP18), mRNA
11405	23856		6.64	6.0E-83	AA486105.1	EST_HUMAN	ab14e10.s1 Stragene lung (#937210) Homo sapiens cDNA clone IMAGE:840810 3' similar to contains THR 12 THR repetitive element ;
11685	24102		5.52	6.0E-83	AF240788.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
982	13594		10.4	5.0E-83	U17883.1	NT	Human succinate dehydrogenase iron-protein subunit (sdhB) gene, exon 5
2084	15397		1.12	5.0E-83	AF006305.1	NT	Homo sapiens 26S proteasome regulatory subunit (SUG2) mRNA, complete cds
3700	16301	28769	0.98	5.0E-83	AL133207.2	NT	Novel human gene mapping to chromosome X
3977	16575	28045	0.94	5.0E-83	4885190	NT	Homo sapiens deoxyribonuclease I (DNASE1), mRNA
4527	17111	28555	0.6	5.0E-83	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
5238	17802	30221	13.17	5.0E-83	4557013	NT	Homo sapiens catalase (CAT) mRNA
5238	17802	30222	13.17	5.0E-83	4557013	NT	Homo sapiens catalase (CAT) mRNA
688	13292	25773	1.34	4.0E-83	AF224689.1	NT	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
3564	16188	28650	1.07	4.0E-83	BE88078.1	EST_HUMAN	601511580F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3913195 5'
1035	13845		3.47	3.0E-83	AA368311.1	EST_HUMAN	EST79542 Placenta 1 Homo sapiens cDNA similar to similar to endogenous retrovirus ERV9
6862	19288		0.68	3.0E-83	A1217223.1	EST_HUMAN	qt3e06.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1755682 3'
1835	14423	26973	1.31	2.0E-83	AA983492.1	EST_HUMAN	qt64g05.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1621592 3' similar to TR:Q92814
1835	14423	26974	1.31	2.0E-83	AA983492.1	EST_HUMAN	qt64g05.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1621592 3' similar to TR:Q92814
1869	14553	27109	2.88	2.0E-83	N66951.1	EST_HUMAN	Q92814 MYELOBLAST KIA0216. ;
2878	15494	27984	1.08	2.0E-83	BE828694.1	EST_HUMAN	Q92814 MYELOBLAST KIA0216. ;

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3307	15918		2.53	2.0E-83	11430834	NT	Homo sapiens sal (Drosophila)-like 1 (SALL1), mRNA
3842	16441		0.78	2.0E-83	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
4429	17015	29457	4.01	2.0E-83	AF202879.1	NT	Homo sapiens hematopoietic progenitor cell antigen CD34 precursor (CD34) mRNA, partial cds
4756	17337	29781	4.54	2.0E-83	7708398	NT	Homo sapiens ankyrin repeat-containing protein ASB-2 (LOC51676), mRNA
4756	17337	29782	4.54	2.0E-83	7708398	NT	Homo sapiens ankyrin repeat-containing protein ASB-2 (LOC51676), mRNA
5479	18109	30518	0.8	2.0E-83	U06879.1	NT	Human carcinoembryonic antigen gene family member 18 (CGM18) gene, exons A1 and B1
6119	18735	31488	1.28	2.0E-83	BE885401.1	EST_HUMAN	601507482F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3909088 5'
7462	19985	32850	6.08	2.0E-83	AF129533.1	NT	Homo sapiens F-box protein Fbl3b (FBL3B) mRNA, partial cds
7784	20327	33232	0.53	2.0E-83	AB001025.1	NT	Homo sapiens mRNA for brain ryanodine receptor, complete cds
7784	20327	33233	0.53	2.0E-83	AB001025.1	NT	Homo sapiens mRNA for brain ryanodine receptor, complete cds
7928	20470	33379	1.54	2.0E-83	U66707.1	NT	Rattus norvegicus densin-180 mRNA, complete cds
8256	20797	33714	2.17	2.0E-83	AF011920.1	NT	Homo sapiens protein kinase CK2 catalytic subunit alpha gene, exon 1
8256	20797	33715	2.17	2.0E-83	AF011920.1	NT	Homo sapiens protein kinase CK2 catalytic subunit alpha gene, exon 1
9797	22295	35278	0.65	2.0E-83	BF128748.1	EST_HUMAN	601811127F1 NIH_MGC_48 Homo sapiens cDNA clone IMAGE:4053894 5'
9947	22442	35419	2.41	2.0E-83	M22094.1	NT	Human neural cell adhesion molecule (N-CAM) secreted isoform mRNA, 3' end
9947	22442	35420	2.41	2.0E-83	M22094.1	NT	Human neural cell adhesion molecule (N-CAM) secreted isoform mRNA, 3' end
10025	22520	35516	1.12	2.0E-83	AU117659.1	EST_HUMAN	AU117659 HEMBA1 Homo sapiens cDNA clone HEMBA1001910 5'
10092	22587	35580	0.78	2.0E-83	AW505600.1	EST_HUMAN	UI-HF-BNO-and-h-07-0-UIr1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3081852 5'
10729	23255	36271	4.98	2.0E-83	11436448	NT	Homo sapiens KIAA0985 protein (KIAA0985), mRNA
10806	23329	36340	1.95	2.0E-83	AL134452.1	EST_HUMAN	DKFZp547J135_r1 547 (synonym: hfbt1) Homo sapiens cDNA clone DKFZp547J135 5'
10806	23329	36341	1.95	2.0E-83	AL134452.1	EST_HUMAN	DKFZp547J135_r1 547 (synonym: hfbt1) Homo sapiens cDNA clone DKFZp547J135 5'
12342	24523		4.52	2.0E-83	AB011399.1	NT	Homo sapiens gene for AF-6, complete cds
1457	14049	26580	2.83	1.0E-83	4504326	NT	Homo sapiens hydroxycy-Coenzyme A dehydrogenase/3-ketacyl-Coenzyme A thiolase/enoyl-Coenzyme A hydratase (trifunctional protein), beta subunit (HADHB) mRNA
1457	14049	26581	2.83	1.0E-83	4504326	NT	Homo sapiens hydroxycy-Coenzyme A dehydrogenase/3-ketacyl-Coenzyme A thiolase/enoyl-Coenzyme A hydratase (trifunctional protein), beta subunit (HADHB) mRNA
1506	14098	26635	15.46	1.0E-83	AF105087.1	NT	Homo sapiens lipopolysaccharide-binding protein (LBP) mRNA, complete cds
1506	14098	26636	15.46	1.0E-83	AF105087.1	NT	Homo sapiens lipopolysaccharide-binding protein (LBP) mRNA, complete cds
2064	14644	27218	1.11	1.0E-83	4503652	NT	Homo sapiens fatty acid-Coenzyme A ligase, very long-chain 1 (FACVL1) mRNA
2681	15239	27807	1.06	1.0E-83	BE883690.1	EST_HUMAN	601507375F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3908754 5'
3217	15829	28308	0.69	1.0E-83	7662349	NT	Homo sapiens cell recognition molecule Caspr2 (KIAA0888), mRNA
3336	16534	29000	5.6	1.0E-83	AF053768.1	NT	Rattus norvegicus brain specific cortactin-binding protein CBP90 mRNA, partial cds
4328	16915	29359	2.45	1.0E-83	Z25822.1	NT	H. sapiens gene for mitochondrial dodecanoyl-CoA delta-isomerase, exon 3

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6797	19388	32204	1.58	1.0E-83	AI027814.1	EST_HUMAN	ov98b08.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1645431 3' similar to gb:M64241 QM PROTEIN (HUMAN);
3864	16462	28926	3.57	7.0E-84	BE901209.1	EST_HUMAN	601676023F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3958853 5'
1338	13932	28451	3.5	6.0E-84	BE838864.1	EST_HUMAN	RC2-FN0119-200600-011-g05 FN0119 Homo sapiens cDNA
1338	13932	28451	3.5	6.0E-84	BE838864.1	EST_HUMAN	RC2-FN0119-200600-011-g05 FN0119 Homo sapiens cDNA
2441	15008	27580	21.62	6.0E-84	AA776574.1	EST_HUMAN	ae86a03.s1 Strategene schizo brain S11 Homo sapiens cDNA clone IMAGE:971020 3'
5449	18019		2.84	6.0E-84	AL042863.2	EST_HUMAN	DKFZp434H0322.1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434H0322 5'
5709	18335	30840	1.74	6.0E-84	AA897339.1	EST_HUMAN	al47g03.s1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1460500 3' similar to gb:M14338 VITAMIN K-DEPENDENT PROTEIN S PRECURSOR (HUMAN);
5841	18465	31189	1.08	6.0E-84	11426718	NT	Homo sapiens acetyl LDL receptor; SREC=scavenger receptor expressed by endothelial cells (SREC); mRNA
5841	18465	31190	1.08	6.0E-84	11426718	NT	Homo sapiens acetyl LDL receptor; SREC=scavenger receptor expressed by endothelial cells (SREC); mRNA
7489	20012	32878	3.2	6.0E-84	BE810371.1	EST_HUMAN	PMO-LT0019-190600-004-F02 L10019 Homo sapiens cDNA
7879	20190	33079	0.93	6.0E-84	AF038391.1	NT	Homo sapiens pre-mRNA splicing factor (PRP18) mRNA, complete cds
8018	20560	33461	1.85	6.0E-84	BE770199.1	EST_HUMAN	PM4-FT0054-160600-004-a10 FT0054 Homo sapiens cDNA
11409	23960		2	6.0E-84	AW369812.1	EST_HUMAN	IL0-BT0168-091199-139-e06 BT0168 Homo sapiens cDNA
743	13963	25858	0.69	5.0E-84	AA382811.1	EST_HUMAN	EST196094 Testis 1 Homo sapiens cDNA 5' end
3048	15684		1.4	5.0E-84	AF109718.1	NT	Homo sapiens chromosome 3 subtelomeric region
11419	23870	36931	2.7	5.0E-84	11426740	NT	Homo sapiens regulatory factor X, 3 (influences HLA class II expression) (RFX3), mRNA
11506	23955	37024	1.95	5.0E-84	AB032957.1	NT	Homo sapiens mRNA for KIAA1131 protein, partial cds
11506	23955	37025	1.95	5.0E-84	AB032957.1	NT	Homo sapiens mRNA for KIAA1131 protein, partial cds
1456	14048	26579	2.3	4.0E-84	AI685321.1	EST_HUMAN	wa76d04.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2302086 3' similar to SW/NRDC HUMAN 043847 NARDILYSIN PRECURSOR;
5085	17958	30099	0.79	4.0E-84	4505928	NT	Homo sapiens polymerase (DNA-directed), alpha (70kD) (POLA2), mRNA
5086	17959	30100	1.62	4.0E-84	AF069601.2	NT	Homo sapiens myosin light chain kinase isoform 2 (MLCK) mRNA, complete cds
5751	18377	31087	1.42	4.0E-84	11386168	NT	Homo sapiens protein tyrosine phosphatase, receptor type, G (PTPRG), mRNA
5751	18377	31088	1.42	4.0E-84	11386168	NT	Homo sapiens protein tyrosine phosphatase, receptor type, G (PTPRG), mRNA
6414	19017	31800	2.16	4.0E-84	AF059650.1	NT	Homo sapiens histone deacetylase 3 (HDAC3) gene, complete cds
7843	20155	33041	13.58	4.0E-84	11421326	NT	Homo sapiens KIAA0783 gene product (KIAA0783), mRNA
8842	21381	34305	1.06	4.0E-84	4557526	NT	Homo sapiens discs, large (Drosophila) homolog 2 (chapsyn-110) (DLG2) mRNA
8842	21381	34306	1.06	4.0E-84	4557526	NT	Homo sapiens discs, large (Drosophila) homolog 2 (chapsyn-110) (DLG2) mRNA
10788	23321	36331	5.78	4.0E-84	AB032956.1	NT	Homo sapiens mRNA for KIAA1130 protein, partial cds
338	12990	25477	1.97	3.0E-84	AF026200.1	NT	Homo sapiens Bact1 protein homolog mRNA, partial cds

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1194	13795	26304	0.86	3.0E-84	4758081	NT	Homo sapiens chondroin sulfate proteoglycan 2 (versican) (CSPG2) mRNA
2003	14585	27144	1.93	3.0E-84	5453855	NT	Homo sapiens pericentriolar material 1 (PCM1) mRNA
2051	14632	27203	1.94	3.0E-84	AL096880.1	NT	Novel human mRNA containing Zinc finger C2H2 type domains
3812	16411	28876	5.94	3.0E-84	AF014459.1	NT	Homo sapiens X-linked juvenile retinoschisis precursor protein (XLRSS1) mRNA, complete cds
10758	23282		10.76	3.0E-84	AI983801.1	EST_HUMAN	wu20d05.x1 Soares_Diackgraeffe_cdonc_NHCD Homo sapiens cDNA clone IMAGE:2520585 3' similar to gb:105093.60S RIBOSOMAL PROTEIN L18A (HUMAN);
2153	14730	27304	6.66	2.0E-84	BE685397.1	EST_HUMAN	CM1-BT0795-190600-272-508 BT0795 Homo sapiens cDNA
2153	14730	27305	6.66	2.0E-84	BE685397.1	EST_HUMAN	CM1-BT0795-190600-272-508 BT0795 Homo sapiens cDNA
2970	15586	28068	11.6	2.0E-84	AF036943.1	NT	Homo sapiens myelin transcription factor 1-like (MYT1-L) mRNA, complete cds
2889	15605	28085	1.3	2.0E-84	X89211.1	NT	H. sapiens DNA for endogenous retroviral like element
5717	18343	30849	1.02	2.0E-84	BF511575.1	EST_HUMAN	UI-H-B14-ec4-02-0-UI.s1 NCL_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3084963 3'
5717	18343	30850	1.02	2.0E-84	BF511575.1	EST_HUMAN	UI-H-B14-ec4-02-0-UI.s1 NCL_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3084963 3'
6748	18341	32148	1.04	2.0E-84	H63370.1	EST_HUMAN	yf5611.s1 Soares fetal liver spleen INFLS Homo sapiens cDNA clone IMAGE:206324 3'
8001	20543		1.51	2.0E-84	AI298674.1	EST_HUMAN	qm87c09.x1 NCL_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1895728 3'
9269	21795	34744	0.89	2.0E-84	AU120280.1	EST_HUMAN	AU120280 HEMBB1 Homo sapiens cDNA clone HEMBB1000339 5'
9847	22146	35117	0.55	2.0E-84	H22841.1	EST_HUMAN	ym49e11.r1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:51383 5' similar to SP-APOH_RAT P28844 BETA-2-GLYCOPROTEIN1;
11954	24279	31021	1.69	2.0E-84	BF448000.1	EST_HUMAN	nae30a02.x1 Lupski_sympathetic_trunk Homo sapiens cDNA clone IMAGE:4090251 3' similar to TR:Q8UGS3 Q8UGS3 DJ756G23.1;
11954	24279	31022	1.69	2.0E-84	BF448000.1	EST_HUMAN	nae30a02.x1 Lupski_sympathetic_trunk Homo sapiens cDNA clone IMAGE:4090251 3' similar to TR:Q8UGS3 Q8UGS3 DJ756G23.1;
334	12986	25473	1.61	1.0E-84	AF114488.1	NT	Homo sapiens tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, zeta polypeptide (YWHAZ) mRNA
575	13205	25685	7.74	1.0E-84	4507952	NT	Homo sapiens complement component 5 (C5), mRNA
749	13369		4	1.0E-84	11427631	NT	Homo sapiens complement component 5 (C5), mRNA
1336	13930	26449	3.89	1.0E-84	AA984379.1	EST_HUMAN	am85b11.s1 Striatogene schizo brain S11 Homo sapiens cDNA clone IMAGE:1628885 3'
2099	14878	27246	2.49	1.0E-84	BE392137.1	EST_HUMAN	601308008F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3628257 5'
2265	14839	27415	1.21	1.0E-84	11427197	NT	Homo sapiens pericentriolar material 1 (PCM1), mRNA
2945	15561	28035	1.09	1.0E-84	4507848	NT	Homo sapiens ubiquitin specific protease 13 (USP13), mRNA
2945	15561	28036	1.09	1.0E-84	4507848	NT	Homo sapiens ubiquitin specific protease 13 (isopeptidase T-3) (USP13), mRNA
3814	16414	28878	2.92	1.0E-84	AA720851.1	EST_HUMAN	mw12e06.s1 NCL_CGAP_SS1 Homo sapiens cDNA clone IMAGE:1239106 3'
4508	17092	29539	6.06	1.0E-84	AJ229041.1	NT	Homo sapiens 959 kb contig between AVI1 and CBR1 on chromosome 21q22; segment 1/3
4809	17387	29837	3.09	1.0E-84	AL043314.2	EST_HUMAN	DKFZp434N0323_r1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434N0323 5'
4809	17387	29838	3.09	1.0E-84	AL043314.2	EST_HUMAN	DKFZp434N0323_r1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434N0323 5'

Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5037	17092	29539	3.8	1.0E-84	AJ229041.1	NT	Homo sapiens 959 kb contig between AML1 and CBR1 on chromosome 21q22; segment 1/3
6079	18696	31443	0.81	1.0E-84	11434422	NT	Homo sapiens speckle-type POZ protein (SPOP), mRNA
8337	18943	31722	1.46	1.0E-84	ST3482.1	NT	uterine water channel=28 kda erythrocyte integral membrane protein homolog [human, uterus, mRNA, 1340 nt]
6961	19538	32361	1.63	1.0E-84	AL049784.1	NT	Novel human gene mapping to chromosome 13
6961	19538	32362	1.63	1.0E-84	AL049784.1	NT	Novel human gene mapping to chromosome 13
7162	18694	32540	2.39	1.0E-84	AL049784.1	NT	Novel human gene mapping to chromosome 13
7486	20009	32875	3.27	1.0E-84	8393964	NT	Homo sapiens polymerase (DNA directed), alpha (POLA), mRNA
7665	20082	32956	1.18	1.0E-84	11430846	NT	Homo sapiens NGF-A binding protein 1 (ERG1 binding protein 1) (NAB1), mRNA
7598	20082	32858	2.45	1.0E-84	11430846	NT	Homo sapiens NGF-A binding protein 1 (ERG1 binding protein 1) (NAB1), mRNA
9454	21880		4.5	1.0E-84	5031984	NT	Homo sapiens nuclear transport factor 2 (placental protein 15) (PPI5), mRNA
9685	22184	35159	0.58	1.0E-84	AF224511.1	NT	Homo sapiens Ca2+-binding protein CABP3 (CABP3) gene, exon 6 and partial cds
9708	15561	28035	2.37	1.0E-84	4507848	NT	Homo sapiens ubiquitin specific protease 13 (isopeptidase T-3) (USP13), mRNA
9708	15561	28036	2.37	1.0E-84	4507848	NT	Homo sapiens ubiquitin specific protease 13 (isopeptidase T-3) (USP13), mRNA
11833	24198		2.44	1.0E-84	11417812	NT	Homo sapiens purinergic receptor P2X-like 1, orphan receptor (P2RXL1), mRNA
11943	24274	31017	3.97	1.0E-84	11418185	NT	Homo sapiens aconitase 2, mitochondrial (ACO2), mRNA
1002	13613		4.54	9.0E-85	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
1111	13715	26224	6.29	9.0E-85	U51432.1	NT	Homo sapiens nuclear protein Skip mRNA, complete cds
1111	13715	26225	6.29	9.0E-85	U51432.1	NT	Homo sapiens nuclear protein Skip mRNA, complete cds
1424	14017	26546	1.35	9.0E-85	4758669	NT	Homo sapiens leupaxin (LDPL), mRNA
1622	14215	26746	9.44	9.0E-85	M33282.1	NT	Human plasminogen gene, exon 7
1622	14215	26747	9.44	9.0E-85	M33282.1	NT	Human plasminogen gene, exon 7
1714	14306	26845	2.45	9.0E-85	7657020	NT	Homo sapiens DKFZP434P211 protein (DKFZP434P211), mRNA
4338	16925	29366	0.97	9.0E-85	AL163280.2	NT	Homo sapiens chromosome 21 segment HS21C080
5006	17579	30023	0.96	9.0E-85	5901979	NT	Homo sapiens heat shock transcription factor 2 binding protein (HSF2BP), mRNA
5038	17611	30055	1.02	9.0E-85	AL163268.2	NT	Homo sapiens chromosome 21 segment HS21C068
1175	13777	26287	10.28	7.0E-85	L05094.1	NT	Homo sapiens ribosomal protein L27 mRNA, complete cds
11499	23948		11.38	7.0E-85	AF113210.1	NT	Homo sapiens MSTP030 mRNA, complete cds
11294	23746	36803	3.15	6.0E-85	11438573	NT	Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 10 (RNA helicase) (DDX10), mRNA
11294	23746	36804	3.15	6.0E-85	11438573	NT	Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 10 (RNA helicase) (DDX10), mRNA
2371	14941	27514	1.09	5.0E-85	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4525	17109		0.59	5.0E-85	AF211189.1	NT	Homo sapiens T-type calcium channel alpha1 subunit Alpha1-a isoform (CACNA1I) mRNA, complete cds
5642	18271	30744	1.42	5.0E-85	BF035674.1	EST_HUMAN	601458646F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3862402 5'
5642	18271	30745	1.42	5.0E-85	BF035674.1	EST_HUMAN	601458646F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3862402 5'
10998	23512	36545	1.95	5.0E-85	AF224698.1	NT	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
12589	17109		3.17	5.0E-85	AF211189.1	NT	Homo sapiens T-type calcium channel alpha1 subunit Alpha1-a isoform (CACNA1I) mRNA, complete cds
6297	18905	31675	1.63	4.0E-85	BF677910.1	EST_HUMAN	602084730F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4249087 5'
6297	18905	31676	1.63	4.0E-85	BF677910.1	EST_HUMAN	602084730F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4249087 5'
10464	22958		1.64	4.0E-85	BE079283.1	EST_HUMAN	RC1-BT0623-120200-011-c07 BT0623 Homo sapiens cDNA
1342	13937	26458	0.86	3.0E-85	AF098157.1	NT	Homo sapiens protein phosphatase 2A BR gamma subunit gene, exon 6
1818	14408	26950	5.08	3.0E-85	T97495.1	EST_HUMAN	ye53g09.r1 Soares fetal liver spleen 1NFSL Homo sapiens cDNA clone IMAGE:121504 5'
4405	18990	29434	0.93	3.0E-85	BE267189.1	EST_HUMAN	601189704F2 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3533616 5'
5025	17599	30043	1.44	3.0E-85	11024695	NT	Homo sapiens F-box only protein 24 (FBXO24), mRNA
5025	17599	30044	1.44	3.0E-85	11024695	NT	Homo sapiens F-box only protein 24 (FBXO24), mRNA
6283	18891	31659	6.49	3.0E-85	7662309	NT	Homo sapiens KIAA0793 gene product (KIAA0793), mRNA
6283	18891	31660	6.49	3.0E-85	7662309	NT	Homo sapiens KIAA0793 gene product (KIAA0793), mRNA
7032	19568		7.22	3.0E-85	AJ404468.1	NT	Homo sapiens mRNA for dynein heavy chain (DNAH9 gene)
7428	19952	32817	0.95	3.0E-85	11416870	NT	Homo sapiens GTPase regulator associated with the focal adhesion kinase pp125(FAK); KIAA0821 protein (KIAA0821), mRNA
7813	20356	33284	1.55	3.0E-85	U44953.1	NT	Homo sapiens DENN mRNA, complete cds
8445	20985	33900	0.78	3.0E-85	11525828	NT	Homo sapiens CGI-81 protein (LOC51108), mRNA
8909	21447	34369	3.75	3.0E-85	11430899	NT	Homo sapiens phospholipase C, epsilon (PLCE), mRNA
9230	21952	34901	1.32	3.0E-85	11421422	NT	Homo sapiens small nuclear ribonucleoprotein polypeptide B" (SNRNPB2), mRNA
9230	21952	34902	1.32	3.0E-85	11421422	NT	Homo sapiens small nuclear ribonucleoprotein polypeptide B" (SNRNPB2), mRNA
10377	22871	35864	0.81	3.0E-85	AF098642.1	NT	Homo sapiens phospholipid scramblase mRNA, complete cds
11380	23832	36895	2.25	3.0E-85	5031660	NT	Homo sapiens EGF-like repeats and discoidin-like domains 3 (EDL3), mRNA
12470	24595		2.19	3.0E-85	11418177	NT	Homo sapiens Ran GTPase activating protein 1 (RANGAPT), mRNA
998	13609	26124	3.12	2.0E-85	7657266	NT	Homo sapiens KIAA0929 protein Mx2 interacting nuclear target (MINT) homolog (KIAA0929), mRNA
1078	13683	26194	2.1	2.0E-85	AF249540.1	NT	Homo sapiens intersectin 2 (SH3D1B) mRNA, complete cds
1450	14042	26570	3.85	2.0E-85	7708205	NT	Homo sapiens CGI-201 protein (LOC51340), mRNA
1465	14057	26590	32.65	2.0E-85	5174775	NT	Homo sapiens apolipoprotein C-II (APOC2), mRNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1465	14057	26591	32.65	2.0E-85	5174775	NT	Homo sapiens apolipoprotein C-II (APOC2) mRNA
2274	14848	27424	2.27	2.0E-85	U10525.1	NT	Human DNA polymerase beta gene, exons 12 and 13
2850	13976		8.53	2.0E-85	7657488	NT	Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1), mRNA
3057	15873	28149	1.18	2.0E-85	M30938.1	NT	Human Ku (p70/p80) subunit mRNA, complete cds
4427	17013	29455	7.95	2.0E-85	4505860	NT	Homo sapiens plasminogen (PLG) mRNA
4664	17246	29700	8.24	2.0E-85	4829977	NT	Homo sapiens reelin (RELN) mRNA
5036	17610	30054	1.19	2.0E-85	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
5313	17875	30297	1.73	2.0E-85	4502212	NT	Homo sapiens arginase, liver (ARG1) mRNA
9197	21714	34658	1.33	2.0E-85	A1760820.1	EST_HUMAN	w167h08.x1 NCI_CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2398431 3' similar to contains element
9567	22067	35027	0.84	2.0E-85	A1814459.1	EST_HUMAN	MSR1 repetitive element;
10163	22658	35654	1.38	2.0E-85	A1886384.1	EST_HUMAN	w169d03.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2331461 3'
2326	14897		2.43	1.0E-85	BE794306.1	EST_HUMAN	w169d12.x1 NCI_CGAP_U12 Homo sapiens cDNA clone IMAGE:2443607 3'
2437	15004	27576	8.29	1.0E-85	BE618392.1	EST_HUMAN	601591416F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3945818 5'
2437	15004	27577	8.29	1.0E-85	BE618392.1	EST_HUMAN	601462817F1 NIH_MGC_87 Homo sapiens cDNA clone IMAGE:3866021 5'
9696	22195	35168	2.03	1.0E-85	BE257917.1	EST_HUMAN	601462817F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3866021 5'
10804	23327	36337	2.67	1.0E-85	AA778785.1	EST_HUMAN	601109739F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3350553 5'
10804	23327	36338	2.67	1.0E-85	AA778785.1	EST_HUMAN	245f03.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:453245 3'
10876	23397	36413	2.59	1.0E-85	BF311552.1	EST_HUMAN	245f03.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:453245 3'
10876	23397	36414	2.59	1.0E-85	BF311552.1	EST_HUMAN	601897003F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4126440 5'
10943	23459	36482	2.48	1.0E-85	Y00052.1	NT	601897003F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4126440 5'
11605	24048	37114	2.17	1.0E-85	A198420.1	EST_HUMAN	Human mRNA for T-cell cyclophilin
11838	24363	30869	4.42	1.0E-85	11417882	NT	q156a07.x1 NCI_CGAP_Bin25 Homo sapiens cDNA clone IMAGE:1860488 3'
12098	24363	30869	5.48	1.0E-85	11417882	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
1475	14067		17.55	9.0E-86	BE274217.1	EST_HUMAN	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
6275	18883	31651	1.65	8.0E-86	11424140	NT	601120778F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:2987690 5'
11543	23981	37063	1.95	8.0E-86	4503224	NT	Homo sapiens similar to CDC28 protein kinase 1 (H. sapiens) (LOC63041), mRNA
244	12903	25384	0.68	7.0E-86	7662247	NT	Homo sapiens cytochrome P450, subfamily IIF, polypeptide 1 (CYP2F1) mRNA
972	13583	26096	1.06	7.0E-86	AA860801.1	EST_HUMAN	Homo sapiens KIAA0680 gene product (KIAA0680), mRNA
972	13583	26097	1.06	7.0E-86	AA860801.1	EST_HUMAN	Homo sapiens KIAA0680 gene product (KIAA0680), mRNA
6343	18949	31726	1.01	7.0E-86	9966886	NT	aj88f08.s1 Soares_parathyroid_tumor_NBHPA Homo sapiens cDNA clone IMAGE:1403559 3'
6343	18949	31727	1.01	7.0E-86	9966886	NT	aj88f08.s1 Soares_parathyroid_tumor_NBHPA Homo sapiens cDNA clone IMAGE:1403559 3'
7053	18072	30463	5.8	7.0E-86	11421737	NT	Homo sapiens tumor endothelial marker 7 precursor (TEM7), mRNA
8678	21218	34138	3.41	7.0E-86	L38557.1	NT	Homo sapiens Tax1 (human T-cell leukemia virus type 1) binding protein 1 (TAX1BP1), mRNA
							Homo sapiens galactocerebrosidase (GALC) gene, exon 15

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9616	22116		1.53	7.0E-86	5453987	NT	Homo sapiens RAN binding protein 7 (RANBP7), mRNA
9873	22172	35148	1.82	7.0E-86	11529307	NT	Homo sapiens DiGeorge syndrome critical region gene 6 (DGCR6), mRNA
10841	23362	36377	2.38	7.0E-86	11417012	NT	Homo sapiens similar to transcription factor CA150 (H. sapiens) (LOC63170), mRNA
10841	23362	36378	2.38	7.0E-86	11417012	NT	Homo sapiens similar to transcription factor CA150 (H. sapiens) (LOC63170), mRNA
11638	24077	37137	2.7	7.0E-86	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
1337	13931	28450	2.34	6.0E-86	4505492	NT	Homo sapiens octoglutaryl dehydrogenase (liponamide) (OGDH), mRNA
228	12886	25373	2.46	4.0E-86	BE547173.1	EST_HUMAN	601072594F1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3458830 5'
6185	18795	31563	10.86	4.0E-86	BE285943.1	EST_HUMAN	601176895F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3531953 5'
11120	12888	25373	1.86	4.0E-86	BE547173.1	EST_HUMAN	601072594F1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3458830 5'
4377	16964	28410	0.64	3.0E-86	BE867703.1	EST_HUMAN	601443262F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3847455 5'
5782	18407	31123	8.23	3.0E-86	AW340946.1	EST_HUMAN	x28212.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:2871719 3'
8205	20746	33658	1.15	3.0E-86	AV723229.1	EST_HUMAN	AV723229 HTB Homo sapiens cDNA clone HTBBSD04 5'
10121	22816	35806	3.12	3.0E-86	BE86479.1	EST_HUMAN	601509696F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3911303 5'
10121	22816	35807	3.12	3.0E-86	BE86479.1	EST_HUMAN	601509696F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3911303 5'
11312	23010	36018	10.63	3.0E-86	AI659240.1	EST_HUMAN	tu18502.x1 NCI_CGAP_Pt28 Homo sapiens cDNA clone IMAGE:2251371 3'
11808	24893		3.18	3.0E-86	BE410354.1	EST_HUMAN	601302333F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3636753 5'
288	12944	25429	2.06	2.0E-86	AA306264.1	EST_HUMAN	EST177232 Jurkat T-cells V1 Homo sapiens cDNA 5' end
439	13072		2.33	2.0E-86	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
1232	13631	26345	2.16	2.0E-86	N58977.1	EST_HUMAN	yz18a08.r1 Soares, multiple sclerosis_2NbhMSP Homo sapiens cDNA clone IMAGE:283478 5'
2233	14808	27381	1.95	2.0E-86	9635487	NT	Human endogenous retrovirus, complete genome
3462	16069	28542	1.38	2.0E-86	AW966142.1	EST_HUMAN	EST378215 MAGE resequences, MAGE Homo sapiens cDNA
3809	16408	28872	2.88	2.0E-86	AF156776.1	NT	Homo sapiens lysophosphatidic acid acyltransferase-delta (LPAAT-delta) mRNA, complete cds
3809	16408	28873	2.89	2.0E-86	AF156776.1	NT	Homo sapiens lysophosphatidic acid acyltransferase-delta (LPAAT-delta) mRNA, complete cds
4113	16707		3.01	2.0E-86	AW515742.1	EST_HUMAN	hd87g08.x1 NCI_CGAP_GC6 Homo sapiens cDNA clone IMAGE:2916542 3'
4904	17479	29937	3.25	2.0E-86	AF056480.1	NT	Homo sapiens cAMP-specific phosphodiesterase 8A (PDE8A), partial cds
6032	18651	31392	1.55	2.0E-86	Z16411.1	NT	H. sapiens mRNA encoding phospholipase c
6032	18651	31393	1.55	2.0E-86	Z16411.1	NT	H. sapiens mRNA encoding phospholipase c
7134	24773	32284	0.86	2.0E-86	11419429	NT	Homo sapiens similar to ectonucleotide pyrophosphatase/phosphodiesterase 3 (H. sapiens) (LOC63214), mRNA
7952	20494	33403	0.6	2.0E-86	U84744.1	NT	Human Chediak-Higashi syndrome protein short isoform (LYST) mRNA, complete cds
8453	20993		0.54	2.0E-86	AL163227.2	NT	Homo sapiens chromosome 21 segment HS21C027
							Homo sapiens butyrobetaine (gamma), 2-oxoglutarate dioxygenase (gamma-butyrobetaine hydroxylase) (BBOX), mRNA
8509	21048	33969	2.19	2.0E-86	11437135	NT	

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8509	21048	33970	2.19	2.0E-86	11437135	NT	Homo sapiens butyrobetaine (gamma), 2-oxoglutarate dioxygenase (gamma-butyrobetaine hydroxylase) (BBOX), mRNA
8834	21373	34298	1.29	2.0E-86	10863878	NT	Homo sapiens phospholipid scramblase 1 (PLSCR1), mRNA
9242	21798	34717	2.06	2.0E-86	11422084	NT	Homo sapiens chromosome segregation 1 (yeast homolog)-like (CSE1L), mRNA
10344	22838	35833	2.82	2.0E-86	11545846	NT	Homo sapiens basic-helix-loop-helix-PAS protein (NPAS3), mRNA
10344	22838	35834	2.82	2.0E-86	11545846	NT	Homo sapiens basic-helix-loop-helix-PAS protein (NPAS3), mRNA
10347	22841	35837	1.85	2.0E-86	11417120	NT	Homo sapiens hypothetical protein FLJ20125 (FLJ20125), mRNA
10397	22891	35885	0.85	2.0E-86	AB037832.1	NT	Homo sapiens mRNA for KIAA1411 protein, partial cds
10784	23308	36315	1.94	2.0E-86	4759051	NT	Homo sapiens ribosomal protein S8 kinase, 90kD, polypeptide 5 (RPS8KA5), mRNA
12889	24478	30935	3.82	2.0E-86	11418189	NT	Homo sapiens thyroid autoantigen 70kD (Ku antigen) (G22P1), mRNA
12452	24588		3.36	2.0E-86	AB011399.1	NT	Homo sapiens gene for AF-6, complete cds
1641	14233	26767	1.33	1.0E-86	4826855	NT	Homo sapiens NADH dehydrogenase (ubiquinone) Fe-S protein 1 (75kD) (NADH-coenzyme Q reductase) (NDUFS1), mRNA
3198	15810	28783	1.54	1.0E-86	5453649	NT	Homo sapiens fibulin 5 (FBLN5), mRNA
3272	15834	28368	3.1	1.0E-86	L20492.1	NT	Human gamma-glutamyl transpeptidase mRNA, complete cds
3335	15945	28420	1.24	1.0E-86	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
3335	15945	28421	1.24	1.0E-86	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
4018	16616	28090	0.96	1.0E-86	7708161	NT	Homo sapiens hypothetical protein (LOC51318), mRNA
4018	16616	28091	0.96	1.0E-86	7708161	NT	Homo sapiens hypothetical protein (LOC51318), mRNA
4351	16938	28380	5.98	1.0E-86	AL163300.2	NT	Homo sapiens chromosome 21 segment HS21C100
5042	17815	30059	0.9	1.0E-86	AF100751.1	NT	Homo sapiens FK506-binding protein FKBP3 isoform mRNA, complete cds
5741	18387	31074	1.82	1.0E-86	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
5559	18191		1.72	9.0E-87	AI150703.1	EST_HUMAN	qb77c09.x1 Soares, fetal, heart, NBHH19W Homo sapiens cDNA clone IMAGE:1706128 3' similar to SW:K1CJ_MOUSE P02535 KERATIN, TYPE I CYTOSKELETAL 10 ;
7472	18994	32857	1.78	9.0E-87	4757721	NT	Homo sapiens a disintegrin and metalloproteinase domain 22 (ADAM22), mRNA
7472	18994	32858	1.78	9.0E-87	4757721	NT	Homo sapiens a disintegrin and metalloproteinase domain 22 (ADAM22), mRNA
505	13137	25625	84.09	8.0E-87	X62245.1	NT	O. cuticulus mRNA for elongation factor 1 alpha
2335	14908	27477	2.29	7.0E-87	BF063211.1	EST_HUMAN	7h8502.x1 NCI_CGAP_Cot16 Homo sapiens cDNA clone IMAGE:3322779 3'
2335	14908	27478	2.29	7.0E-87	BF063211.1	EST_HUMAN	7h8502.x1 NCI_CGAP_Cot16 Homo sapiens cDNA clone IMAGE:3322779 3'
8533	19133	31928	0.86	7.0E-87	AW890336.1	EST_HUMAN	MRO-NT0039-020500-004-a11 NT0039 Homo sapiens cDNA
8130	20671	33581	2.87	7.0E-87	BF352776.1	EST_HUMAN	IL3-HT0616-060700-198-D10 HT0619 Homo sapiens cDNA
9375	20314	33216	0.87	7.0E-87	BE712961.1	EST_HUMAN	IL5-HT0702-160800-109-d06 HT0702 Homo sapiens cDNA
9983	22478	35480	3.7	7.0E-87	AL043314.2	EST_HUMAN	DKFZp434N0323_1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434N0323 5'
9983	22478	35481	3.7	7.0E-87	AL043314.2	EST_HUMAN	DKFZp434N0323_1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434N0323 5'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10770	23294	36299	11	7.0E-87	K03002.1	NT	Human mRNA from chromosome 15 gene with homology to MHC-HLA-SB-1 intron A
10770	23294	36300	11	7.0E-87	K03002.1	NT	Human mRNA from chromosome 15 gene with homology to MHC-HLA-SB-1 intron A
3579	18183	28665	0.82	8.0E-87	7657213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
6553	19151	31947	1.54	6.0E-87	AB029004.1	NT	Homo sapiens mRNA for KIAA1081 protein, partial cds
10803	23137		6.8	6.0E-87	11432444	NT	Homo sapiens similar to SET translocation (myeloid leukemia-associated) (H. sapiens) (LOC63102), mRNA
1200	13801	26313	2.58	5.0E-87	AA382811.1	EST_HUMAN	EST66094 Testis 1 Homo sapiens cDNA 5' end
12100	13801	26313	2.47	5.0E-87	AA382811.1	EST_HUMAN	EST66094 Testis 1 Homo sapiens cDNA 5' end
1001	13612	26128	0.85	4.0E-87	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
1214	13814	26328	11.73	4.0E-87	AB037835.1	NT	Homo sapiens mRNA for KIAA1414 protein, partial cds
1476	14068	26605	3.14	4.0E-87	R78133.1	EST_HUMAN	y8010.11 Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:145579 5' similar to contains Alu repetitive element
2468	15033	27599	2.57	4.0E-87	7706298	NT	Homo sapiens CGI-60 protein (LOC51626), mRNA
2468	15033	27600	2.57	4.0E-87	7706298	NT	Homo sapiens CGI-60 protein (LOC51626), mRNA
3511	16116	28595	1.82	4.0E-87	5174574	NT	Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (trithorax (Drosophila) homolog); translocated to, 4 (MLLT4) mRNA
5439	17994		0.92	4.0E-87	AL163281.2	NT	Homo sapiens chromosome 21 segment HS21C081
5637	18266	30738	11.09	4.0E-87	O00321	SWISSPROT	ETS-RELATED PROTEIN 71 (ETS TRANSLLOCATION VARIANT 2)
5925	18547	31273	0.72	4.0E-87	U85426.1	NT	Human transcription factor NFATx3 mRNA, complete cds
6196	18806	31575	4.42	4.0E-87	BE247284.1	EST_HUMAN	TCBAP1E4051 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP4051
11044	23558	36594	5.04	4.0E-87	M60676.1	NT	Human von Willebrand factor pseudogene corresponding to exons 23 through 34
11823	24065	37130	2.12	4.0E-87	11417339	NT	Homo sapiens similar to heat shock 70kD protein 9B (mortalin-2) (H. sapiens) (LOC63184), mRNA
12202	24947	30623	1.81	4.0E-87	11417862	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
12202	24947	30624	1.81	4.0E-87	11417862	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
12371	24541		17.18	4.0E-87	11417812	NT	Homo sapiens purinergic receptor P2X-like 1, orphan receptor (P2RXL1), mRNA
2805	15357	27924	2.34	2.0E-87	4885420	NT	Homo sapiens high-mobility group (nonhistone chromosomal) protein 4 (HMG4), mRNA
2975	15591		1.1	2.0E-87	BF327920.1	EST_HUMAN	QV0-BN0148-050600-254-a03 BN0148 Homo sapiens cDNA
3952	16450	28913	0.78	2.0E-87	AU116935.1	EST_HUMAN	AU116935 HEMBA1 Homo sapiens cDNA clone HEMBA1000307 5'
5039	17612	30056	0.6	2.0E-87	BF376311.1	EST_HUMAN	OM0-TN038-150900-552-h08 TN038 Homo sapiens cDNA
5942	18466	31191	12.69	2.0E-87	BE734190.1	EST_HUMAN	601569041F1 NIH_MGC 21 Homo sapiens cDNA clone IMAGE:3843730 5'
5942	18466	31192	12.69	2.0E-87	BE734190.1	EST_HUMAN	601569041F1 NIH_MGC 21 Homo sapiens cDNA clone IMAGE:3843730 5'
6468	19069		6.41	2.0E-87	BE567193.1	EST_HUMAN	601341383F1 NIH_MGC 53 Homo sapiens cDNA clone IMAGE:3683348 5'
6800	19391	32208	2.12	2.0E-87	N48126.1	EST_HUMAN	yv21e07.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:243396 5'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6877	19811	32444	0.93	2.0E-87	AV654143.1	EST_HUMAN	AV654143 GLC Homo sapiens cDNA clone GLCDSG04.3'
7225	19758	32611	1.43	2.0E-87	BE294432.1	EST_HUMAN	801176032F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3531511 5'
7277	19805	32664	0.76	2.0E-87	11433046	NT	Homo sapiens hect domain and RLD 2 (HERC2), mRNA
7476	19998	32863	31.97	2.0E-87	N48128.1	EST_HUMAN	yv21e07.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:243398 5'
7676	20187	33075	33.12	2.0E-87	N48128.1	EST_HUMAN	yv21e07.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:243398 5'
8334	20875	33787	15.53	2.0E-87	X52851.1	NT	Human cyclophilin gene for cyclophilin (EC 5.2.1.8)
9700	22199		5.14	2.0E-87	BE531136.1	EST_HUMAN	801278315F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3810639 5'
1224	15392		1.66	1.0E-87	7705683	NT	Homo sapiens putative glycolipid transfer protein (LOC51054), mRNA
1478	14070	26607	1.21	1.0E-87	AW361977.1	EST_HUMAN	PM2-CT0265-141099-001-g04 CT0265 Homo sapiens cDNA
1478	14070	26608	1.21	1.0E-87	AW361977.1	EST_HUMAN	PM2-CT0265-141099-001-g04 CT0265 Homo sapiens cDNA
3772	16373	28838	6.16	1.0E-87	Y00052.1	NT	Human mRNA for T-cell cyclophilin
3796	16396	28861	2.65	1.0E-87	4758827	NT	Homo sapiens neurexin III (NRXN3), mRNA
5283	17845	30272	1.14	1.0E-87	U50949.1	NT	Rattus norvegicus taste bud receptor protein TB 641 (TB 641) gene, complete cds
6374	18978	31756	2.17	1.0E-87	AF073371.1	NT	Homo sapiens growth factor receptor-bound protein 10 (GRB10) gene, exon 8
6374	18978	31757	2.17	1.0E-87	AF073371.1	NT	Homo sapiens growth factor receptor-bound protein 10 (GRB10) gene, exon 8
7228	19760	32615	0.72	1.0E-87	AF039517.1	NT	Homo sapiens corticotropin-releasing factor type 1 receptor gene, exon 8
7228	19760	32616	0.72	1.0E-87	AF039517.1	NT	Homo sapiens corticotropin-releasing factor type 1 receptor gene, exon 8
7235	19765	32621	1	1.0E-87	4508786	NT	Homo sapiens IQ motif containing GTPase activating protein 1 (IQGAP1), mRNA
7430	19964	32819	1.18	1.0E-87	11431500	NT	Homo sapiens protein kinase C, beta 1 (PRKCB1), mRNA
8059	20601	33511	10.74	1.0E-87	AF214582.1	NT	Homo sapiens tracheal epithelium enriched protein (PLUNC) gene, complete cds
8840	21379	34302	1.01	1.0E-87	AB022918.1	NT	Homo sapiens mRNA for alpha2,3-sialyltransferase ST3Gal VI, complete cds
8840	21379	34303	1.01	1.0E-87	AB022918.1	NT	Homo sapiens mRNA for alpha2,3-sialyltransferase ST3Gal VI, complete cds
9551	22051	35013	3.71	1.0E-87	BE818183.1	EST_HUMAN	RC8-BN0276-050700-012-E02 BN0276 Homo sapiens cDNA
9551	22051	35014	3.71	1.0E-87	BE818183.1	EST_HUMAN	RC8-BN0276-050700-012-E02 BN0276 Homo sapiens cDNA
10275	22770	35758	0.89	1.0E-87	M34428.1	NT	Human L-plastin mRNA, 5' end
10811	23144	36155	2.84	1.0E-87	5729887	NT	Homo sapiens hect domain and RLD 2 (HERC2), mRNA
10878	23399		1.82	1.0E-87	D10083.1	NT	Homo sapiens RGH1 gene, retrovirus-like element
12188	25086		2.92	1.0E-87	7657632	NT	Homo sapiens sulfotransferase-related protein (SULTX3), mRNA
955	13587	26081	5.21	9.0E-88	5453887	NT	Homo sapiens protease inhibitor 4 (kallistatin) (PI4), mRNA
1145	13748	26257	8.79	9.0E-88	AF116745.1	NT	Homo sapiens double stranded RNA activated protein kinase (PKR) gene, exon 12
1393	13987	26514	2.74	9.0E-88	AB037820.1	NT	Homo sapiens mRNA for KIAA1399 protein, partial cds
1393	13987	26515	2.74	9.0E-88	AB037820.1	NT	Homo sapiens mRNA for KIAA1399 protein, partial cds
3689	16290	28759	1.7	9.0E-88	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
4356	16843	29385	3.11	9.0E-88	X91929.1	NT	H.sapiens ECE-1 gene (exon 9)

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4356	16943	28386	3.11	9.0E-88	X91929.1	NT	H. sapiens ECE-1 gene (exon 9)
5146	17718	30147	1.11	9.0E-88	AB026898.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
8951	21489	34412	3.16	6.0E-88	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
1868	14454		0.96	5.0E-88	7661887	NT	Homo sapiens KIAA0063 gene product (KIAA0063), mRNA
2666	15224	27797	2.31	5.0E-88	N89399.1	EST_HUMAN	K9716F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA clone K9719 5' similar to ZINC FINGER PROTEIN HZF1
3031	15847	28125	0.77	5.0E-88	AF114488.1	NT	Homo sapiens intersectin short isoform (ITSN), mRNA, complete cds
3044	15660	28140	0.91	5.0E-88	AF114488.1	NT	Homo sapiens intersectin short isoform (ITSN), mRNA, complete cds
3044	15660	28141	0.91	5.0E-88	AF114488.1	NT	Homo sapiens intersectin short isoform (ITSN), mRNA, complete cds
3436	16044		2.91	5.0E-88	AI693217.1	EST_HUMAN	wd68h08 x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:2338789 3' similar to contains Alu repetitive element; contains element MER22 MER22 repetitive element;
3588	16192	28676	0.76	5.0E-88	AF114488.1	NT	Homo sapiens intersectin short isoform (ITSN), mRNA, complete cds
4843	17421	29874	0.79	5.0E-88	AF114488.1	NT	Homo sapiens intersectin short isoform (ITSN), mRNA, complete cds
6968	19802	32434	2.99	5.0E-88	H10932.1	EST_HUMAN	ym06b10.1 Soares infant brain TNIB Homo sapiens cDNA clone IMAGE:47129 5'
7870	20412	33318	1.73	5.0E-88	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
9236	21762	34708	0.54	5.0E-88	BF680206.1	EST_HUMAN	602154958F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4295775 5'
11942	14454		1.37	5.0E-88	7661887	NT	Homo sapiens KIAA0063 gene product (KIAA0063), mRNA
1374	13968	26495	1.93	4.0E-88	BF091229.1	EST_HUMAN	PM1-TN0028-050900-004-f10 TN0028 Homo sapiens cDNA
1374	13968	26496	1.93	4.0E-88	BF091229.1	EST_HUMAN	PM1-TN0028-050900-004-f10 TN0028 Homo sapiens cDNA
7292	19820	32679	2.25	4.0E-88	11416585	NT	Homo sapiens transforming growth factor, beta-induced, 88kD (TGFB1), mRNA
10789	23312	36320	1.93	4.0E-88	4502694	NT	Homo sapiens cell division cycle 10 (homologous to CDC10 of S. cerevisiae) (CDC10), mRNA
11362	23814	36874	2.42	4.0E-88	7661947	NT	Homo sapiens KIAA0152 gene product (KIAA0152), mRNA
11362	23814	36875	2.42	4.0E-88	7661947	NT	Homo sapiens KIAA0152 gene product (KIAA0152), mRNA
761	13380	25877	0.96	3.0E-88	11545900	NT	Homo sapiens hypothetical protein FLJ21634 (FLJ21634), mRNA
1848	14436		2.59	3.0E-88	4508020	NT	Homo sapiens zinc finger protein 259 (ZNF259), mRNA
2974	15590	28073	4.76	3.0E-88	N66951.1	EST_HUMAN	z948f12.s1 Soares fetal liver spleen TNFLS Homo sapiens cDNA clone IMAGE:295823 3'
4325	16911	28352	0.64	3.0E-88	4501912	NT	Homo sapiens a disintegrin and metalloproteinase domain 23 (ADAM23), mRNA
4325	16911	28353	0.64	3.0E-88	4501912	NT	Homo sapiens a disintegrin and metalloproteinase domain 23 (ADAM23), mRNA
4576	17159		4.33	3.0E-88	11429300	NT	Homo sapiens hypothetical protein FLJ20220 (FLJ20220), mRNA
5502	18136	30546	2.95	3.0E-88	11429567	NT	Homo sapiens valosin-containing protein (VCP), mRNA
5773	18398	31112	4.24	3.0E-88	9968888	NT	Homo sapiens polycythemia rubra vera 1, cell surface receptor (PRV1), mRNA
5882	18504	31230	3.96	3.0E-88	11420697	NT	Homo sapiens v-ral simian leukemia viral oncogene homolog A (ras related) (RALA), mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Database Source	Top Hit Accession No.	Top Hit Descriptor
6309	18918	31690	1.3	3.0E-88	Homo sapiens Interleukin 13 (IL13), mRNA	11417370 NT	
6345	24764	31938	0.99	3.0E-88	Homo sapiens activator of S phase kinase (ASK), mRNA	11419210 NT	
6345	24764	31939	0.99	3.0E-88	Homo sapiens activator of S phase kinase (ASK), mRNA	11419210 NT	
7126	19465	32283	15.2	3.0E-88	Homo sapiens putative anion transporter 1 mRNA, complete cds	NT	
7546	20668	32940	5.75	3.0E-88	Homo sapiens retinoblastoma-binding protein 2 (RBBP2), mRNA	11436400 NT	
7861	20403	33310	9.25	3.0E-88	Homo sapiens growth differentiation factor 5 (cartilage-derived morphogenetic protein-1) (GDF5), mRNA	11421728 NT	
8137	20878	33589	1.57	3.0E-88	Homo sapiens myoblastum cofactor biosynthesis protein A and myoblastum cofactor biosynthesis protein C mRNA, complete cds	AF034374.1 NT	
8355	20284	33193	2.09	3.0E-88	Homo sapiens v-ets avian erythroblastosis virus E26 oncogene related (ERG), mRNA	11526282 NT	
8841	22339	35320	0.67	3.0E-88	Homo sapiens mRNA for RALDH2-T, complete cds	AB015228.1 NT	
8841	22339	35321	0.67	3.0E-88	Homo sapiens mRNA for RALDH2-T, complete cds	AB015228.1 NT	
9867	22364	35343	0.89	3.0E-88	Homo sapiens acyl-Coenzyme A dehydrogenase family, member 8 (ACAD8), mRNA	11439065 NT	
11828	24283		5.36	3.0E-88	Homo sapiens transcobalamin II; macrocytic anemia (TCN2), mRNA	11417974 NT	
11944	24954	30628	1.26	3.0E-88	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA	11430460 NT	
12669	24738	30828	1.41	3.0E-88	Homo sapiens protease, serine, 7 (enterokinase) (PRSS7), mRNA	11528140 NT	
1074	13679	26188	1.87	2.0E-88	Homo sapiens Calseinilin, presenilin-binding protein, EF hand transcription factor (CSEIN), mRNA	7305198 NT	
1685	14258	26792	1.57	2.0E-88	Homo sapiens SNARE protein kinase SNAK mRNA, complete cds	AF248219.1 NT	
1788	14378	26920	4.58	2.0E-88	Homo sapiens SNARE protein kinase SNAK mRNA, complete cds	AF248219.1 NT	
4516	17100	29547	2.07	2.0E-88	Homo sapiens dynein, axonemal, light polypeptide 4 (DNAL4), mRNA	5031868 NT	
6070	18687	31430	5.11	1.0E-88	U1-H-B11-aaa-q-04-Q-U1.s1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2718750 3'	AW139565.1 EST_HUMAN	
6070	18687	31431	5.11	1.0E-88	U1-H-B11-aaa-q-04-Q-U1.s1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2718750 3'	AW139565.1 EST_HUMAN	
6753	19346	32153	22.7	1.0E-88	Homo sapiens KIAA0417 mRNA, complete cds	AB007877.1 NT	
6753	19346	32154	22.7	1.0E-88	Homo sapiens KIAA0417 mRNA, complete cds	AB007877.1 NT	
7176	19708	32556	1.3	1.0E-88	Homo sapiens KIAA0417 mRNA, complete cds	AF990334.1 EST_HUMAN	
7238	19766	32622	4.05	1.0E-88	Homo sapiens KIAA0417 mRNA, complete cds	AA488981.1 EST_HUMAN	
9168	21743	34886	0.9	1.0E-88	zpb7c02.r1 Striatogene HeLa cell s3 637216 Homo sapiens cDNA clone IMAGE:627170 5' similar to SW:POL1_HUMAN P10266 RETROVIRUS-RELATED POL POLYPROTEIN ;	AA190368.1 EST_HUMAN	
9499	21998	34956	3.09	1.0E-88	DKFZp434N0323_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434N0323 5'	AL043314.2 EST_HUMAN	
11319	23017	36026	6.14	1.0E-88	os91g03.s1 NCI_CGAP_GC3 Homo sapiens cDNA clone IMAGE:1612756 3' similar to gb:M16342 HETEROGENEOUS NUCLEAR RIBONUCLEOPROTEINS C1/C2 (HUMAN);	AA991479.1 EST_HUMAN	
12160	24400		5.36	1.0E-88	Homo sapiens chromosome 21 segment HS21C046	AL163246.2 NT	
10830	23351	36366	3.58	9.0E-89	Homo sapiens transgelin 2 (TAGLN2), mRNA	11421238 NT	

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2763	15317	27884	1.05	8.0E-89	BE311557.1	EST_HUMAN	601142409F1 NIH_MGC_14 Homo sapiens cDNA clone IMAGE:3506186 5'
7012	19510	32331	1.07	8.0E-89	11421514	NT	Homo sapiens similar to sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3A (H. sapiens) (LOC63232), mRNA
458	13092	25885	1.26	7.0E-89	7657213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
458	13092	25886	1.26	7.0E-89	7657213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
5012	17586	30029	2.51	7.0E-89	4557390	NT	Homo sapiens complement component 8, beta polypeptide (C8B), mRNA
5064	17637	30080	6.15	7.0E-89	AL045748.1	EST_HUMAN	DKFZp434E246_r1 434 (synonym: hts3) Homo sapiens cDNA clone DKFZp434E246 5'
5623	18252	30720	1.26	7.0E-89	X99832.1	NT	H. sapiens CLN3 gene, complete CDS
5623	18252	30720	1.26	7.0E-89	X99832.1	NT	H. sapiens CLN3 gene, complete CDS
5623	18252	30721	1.26	7.0E-89	X99832.1	NT	H. sapiens CLN3 gene, complete CDS
6483	19084	31865	1.06	7.0E-89	7549808	NT	Homo sapiens plasmin 3 (T isoform) (PLS3), mRNA
6483	19084	31866	1.06	7.0E-89	7549808	NT	Homo sapiens plasmin 3 (T isoform) (PLS3), mRNA
7510	20031	32896	1.86	7.0E-89	11420754	NT	Homo sapiens actin related protein 2/3 complex, subunit 1A (41 kD) (ARPC1A), mRNA
7820	20362	33269	0.51	7.0E-89	11417118	NT	Homo sapiens KIAA0433 protein (KIAA0433), mRNA
7820	20362	33270	0.51	7.0E-89	11417118	NT	Homo sapiens KIAA0433 protein (KIAA0433), mRNA
8415	20955	33872	0.83	7.0E-89	J02923.1	NT	Human 65-kilodalton phosphoprotein (p65) mRNA, complete cds
10423	22917	35917	1.3	7.0E-89	X62048.1	NT	H. sapiens Wee1 hu gene
10423	22917	35918	1.3	7.0E-89	X62048.1	NT	H. sapiens Wee1 hu gene
10440	22934	35942	0.97	7.0E-89	AB020630.1	NT	Homo sapiens mRNA for KIAA0823 protein, partial cds
10440	22934	35943	0.97	7.0E-89	AB020630.1	NT	Homo sapiens mRNA for KIAA0823 protein, partial cds
12804	24905		1.96	7.0E-89	J05235.1	NT	Human gamma-glutamyl transpeptidase mRNA, complete cds
1061	13666	26177	1.41	6.0E-89	5803114	NT	Homo sapiens inner membrane protein, mitochondrial (IMMT), mRNA
2254	14828	27404	1.24	6.0E-89	4506124	NT	Homo sapiens serine/threonine-protein kinase PRP4 homolog (PRP4), mRNA
2477	15044	27611	1.37	6.0E-89	4507788	NT	Homo sapiens ubiquitin-conjugating enzyme E2L 3 (UBE2L3) mRNA
2477	15044	27612	1.37	6.0E-89	4507788	NT	Homo sapiens ubiquitin-conjugating enzyme E2L 3 (UBE2L3) mRNA
3577	16181	28663	0.91	6.0E-89	7661817	NT	Homo sapiens HSPC159 protein (HSPC159), mRNA
4743	17324	29765	3	6.0E-89	AB007866.2	NT	Homo sapiens mRNA for KIAA0406 protein, partial cds
4743	17324	29766	3	6.0E-89	AB007866.2	NT	Homo sapiens mRNA for KIAA0406 protein, partial cds
5366	17926	30340	0.62	6.0E-89	6806918	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
5366	17926	30341	0.62	6.0E-89	6806918	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
5234	17798	30216	2.68	5.0E-89	BE244323.1	EST_HUMAN	TCBAP2E0383 Pediatric pre-B cell acute lymphoblastic leukemia Bay/for-HGSC project=TCBA Homo sapiens cDNA clone TCBAP0383
5234	17798	30217	2.68	5.0E-89	BE244323.1	EST_HUMAN	TCBAP2E0383 Pediatric pre-B cell acute lymphoblastic leukemia Bay/for-HGSC project=TCBA Homo sapiens cDNA clone TCBAP0383
7587	20102	32977	0.91	4.0E-89	BE762749.1	EST_HUMAN	QV3-NT0022-080600-219-g03 NT0022 Homo sapiens cDNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11020	23534	36570	1.89	4.0E-89	AI798672.1	EST_HUMAN	wb01c03.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2348452 3'
2901	15518	27988	2.21	3.0E-89	AW976181.1	EST_HUMAN	EST388290 IMAGE resequences, MAGN Homo sapiens cDNA
7194	19725	32575	1.5	3.0E-89	AI217359.1	EST_HUMAN	qh17608.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1844915 3'
10678	23210	36221	2.24	3.0E-89	N57357.1	EST_HUMAN	yw86e11.1 Soares_placenta_8to9weeks_2NbHP8to9W Homo sapiens cDNA clone IMAGE:259148 5'
12270	24840	30789	2.82	3.0E-89	AV708431.1	EST_HUMAN	similar to SW:PI4K_HUMAN P42356 PHOSPHATIDYLINOSITOL 4-KINASE ALPHA ;
12364	24537	30902	1.32	3.0E-89	AV705749.1	EST_HUMAN	AV708431 ADC Homo sapiens cDNA clone ADCARE02 5'
132	13066	25561	0.74	2.0E-89	7706670	NT	Homo sapiens PXR2b protein (PXR2b), mRNA
132	13066	25562	0.74	2.0E-89	7706670	NT	Homo sapiens PXR2b protein (PXR2b), mRNA
433	13066	25561	0.65	2.0E-89	7706670	NT	Homo sapiens PXR2b protein (PXR2b), mRNA
433	13066	25562	0.65	2.0E-89	7706670	NT	Homo sapiens PXR2b protein (PXR2b), mRNA
1828	14415	26962	1.71	2.0E-89	AJ238277.1	NT	Homo sapiens mRNA for cancer-testis-associated protein (CTP11 gene)
2905	15522	27992	1.84	2.0E-89	AJ222095.1	EST_HUMAN	qg96c08.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1843022 3' similar to gb.J04131
3608	16212	28691	0.67	2.0E-89	AA759149.1	EST_HUMAN	GAMMA-GLUTAMYL TRANSPEPTIDASE 1 PRECURSOR (HUMAN); contains Alu repetitive element;
3608	16212	28692	0.67	2.0E-89	AA759149.1	EST_HUMAN	ah70e03.s1 Soares_testis_NHT Homo sapiens cDNA clone 1320888 3'
4226	16814	29261	1.18	2.0E-89	AF089897.1	NT	ah70e03.s1 Soares_testis_NHT Homo sapiens cDNA clone 1320888 3'
4233	16821	29271	5.23	2.0E-89	X58742.1	NT	Homo sapiens topoisomerase-related function protein (TRF4-2) mRNA, partial cds
4233	16821	29272	5.23	2.0E-89	X58742.1	NT	H. sapiens HCK gene for tyrosine kinase (PTK), exons 10-11
4441	17027	29467	0.7	2.0E-89	AL163203.2	NT	H. sapiens HCK gene for tyrosine kinase (PTK), exons 10-11
4596	17178	29626	1.52	2.0E-89	AJ007378.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C003
5546	18178	30780	1.07	2.0E-89	BE541744.1	NT	Homo sapiens GGT gene, exon 5
5672	18299	30780	3.13	2.0E-89	AB007546.1	NT	601065996F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3452423 5'
5980	18582	31316	1.44	2.0E-89	U03985.1	NT	Homo sapiens gene for LECT2, complete cds
6358	18962	31739	0.7	2.0E-89	AL163285.2	NT	Human N-ethylmaleimide-sensitive factor mRNA, partial cds
7694	20176	33063	4.46	2.0E-89	U81004.1	NT	Homo sapiens chromosome 21 segment HS21C085
7875	20417	33325	3.22	2.0E-89	11428801	NT	Human GT24 (GT24) mRNA, partial cds
8356	20868	33816	1	2.0E-89	AJ245503.1	NT	Homo sapiens solute carrier family 24 (sodium/potassium/calcium exchanger), member 2 (SLC24A2), mRNA
9177	21754	34701	0.69	2.0E-89	AB037754.1	NT	Homo sapiens partial mRNA for PEX5-related protein
9724	22222	35197	0.85	2.0E-89	AF170814.1	NT	Homo sapiens mRNA for KIAA1333 protein, partial cds
9724	22222	35198	0.65	2.0E-89	AF170814.1	NT	Homo sapiens CaBP5 (CABP5) gene, exon 5

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11252	23782	36838	2.58	2.0E-89	11434411	NT	Homo sapiens integrin, alpha 3 (antigen CD49C, alpha 3 subunit of VLA-3 receptor) (ITGA3), mRNA
11444	23894	36959	5.1	2.0E-89	11433673	NT	Homo sapiens cell adhesion molecule with homology to L1CAM (close homologue of L1) (CHL1), mRNA
11564	24011	37081	2.25	2.0E-89	U10692.1	NT	Human Mage-7 antigen (IMAGE7) pseudogene, complete cds
11449	23899	36965	6.8	1.0E-89	BF196052.1	EST_HUMAN	h81d09.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3134897 3' similar to TR:O54778 O54778
11449	23899	36966	6.8	1.0E-89	BF196052.1	EST_HUMAN	SOLUTE CARRIER FAMILY 22-LIKE 2 PROTEIN ;
8169	20710	33626	1.59	9.0E-90	AL163246.2	NT	SOLUTE CARRIER FAMILY 22-LIKE 2 PROTEIN ;
8169	20710	33627	1.59	9.0E-90	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
1101	13706	26214	1.9	8.0E-90	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
1102	13706	26214	2.3	8.0E-90	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
1375	15439	28497	4.58	8.0E-90	BE870561.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C046
1375	15439	28498	4.58	8.0E-90	BE870561.1	EST_HUMAN	783608.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3284583 3'
8495	21034	33955	0.68	8.0E-90	BE177830.1	EST_HUMAN	783608.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3284583 3'
10579	23114	36127	1.61	8.0E-90	A1222095.1	EST_HUMAN	RC1-HT0598-120400-022-b08 HT0598 Homo sapiens cDNA
10579	23114	36128	1.61	8.0E-90	A1222095.1	EST_HUMAN	q996c08.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1843022 3' similar to gb:J04131
869	13484		4.46	7.0E-90	AF223391.1	NT	GAMMA-GLUTAMYL TRANSPEPTIDASE 1 PRECURSOR (HUMAN); contains Alu repetitive element;
8363	20903		1.73	7.0E-90	AA782977.1	EST_HUMAN	q996c08.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1843022 3' similar to gb:J04131
8896	21434	34357	1.47	7.0E-90	BE962525.2	EST_HUMAN	GAMMA-GLUTAMYL TRANSPEPTIDASE 1 PRECURSOR (HUMAN); contains Alu repetitive element;
8896	21434	34358	1.47	7.0E-90	BE962525.2	EST_HUMAN	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
10042	22537	35533	2.15	7.0E-90	H68849.1	EST_HUMAN	601655837R1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:1375503 3'
10042	22537	35534	2.15	7.0E-90	H68849.1	EST_HUMAN	601655837R1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3855824 3'
10352	22846	35940	0.69	7.0E-90	BF529089.1	EST_HUMAN	601655837R1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3855824 3'
3104	15719	28189	1.18	6.0E-90	X91926.1	NT	y86e04.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:212190 3' similar to SP:C1TC_HUMAN P11586 C-1-TE TRAHYDROFOLATE SYNTHASE, CYTOPLASMIC ;
3104	15719	28190	1.18	6.0E-90	X91926.1	NT	y86e04.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:212190 3' similar to SP:C1TC_HUMAN P11586 C-1-TE TRAHYDROFOLATE SYNTHASE, CYTOPLASMIC ;
							602071208F1 NCI_CGAP_Bim64 Homo sapiens cDNA clone IMAGE:4214257 5'
							H.sapiens ECE-1 gene (exon 6)
							H.sapiens ECE-1 gene (exon 6)

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4311	16897	29341	8.68	6.0E-90	8922398	NT	Homo sapiens hypothetical protein FLJ10388 (FLJ10388), mRNA
4311	16897	29342	8.68	6.0E-90	8922398	NT	Homo sapiens hypothetical protein FLJ10388 (FLJ10388), mRNA
6137	18751	31508	3.08	6.0E-90	U77700.1	NT	Homo sapiens HsGCN1 mRNA, partial cds
6137	18751	31509	3.08	6.0E-90	U77700.1	NT	Homo sapiens HsGCN1 mRNA, partial cds
8269	20810	33730	3.18	6.0E-90	4504794	NT	Homo sapiens inositol 1,4,5-triphosphate receptor, type 3 (ITPR3) mRNA
8269	20810	33731	3.18	6.0E-90	4504794	NT	Homo sapiens inositol 1,4,5-triphosphate receptor, type 3 (ITPR3) mRNA
186	12829		24.29	5.0E-90	AB035344.1	NT	Homo sapiens TOL8 gene, exon 1-10b
1234	13833	26347	2.39	5.0E-90	U80226.1	NT	Human gamma-aminobutyric acid transaminase mRNA, partial cds
1858	14446	27002	2.57	5.0E-90	A1222095.1	EST_HUMAN	qg86c08.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1843022 3' similar to gb.J04131 GAMMA-GLUTAMYL TRANSPEPTIDASE 1 PRECURSOR (HUMAN); contains Alu repetitive element;
1858	14446	27003	2.57	5.0E-90	A1222095.1	EST_HUMAN	qg86c08.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1843022 3' similar to gb.J04131 GAMMA-GLUTAMYL TRANSPEPTIDASE 1 PRECURSOR (HUMAN); contains Alu repetitive element;
2591	15153	27720	4.06	5.0E-90	AF114487.1	NT	Homo sapiens intersecin long isoform (ITSN) mRNA, complete cds
4838	17220	29874	10.01	5.0E-90	4506354	NT	Homo sapiens pregnancy-zone protein (PZP) mRNA
4860	17242	29696	0.84	5.0E-90	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
5777	18402	31118	2.63	5.0E-90	Z18411.1	NT	H. sapiens mRNA encoding phospholipase c
5871	18483	31220	1.13	5.0E-90	AB015617.1	NT	Homo sapiens ELKS mRNA, complete cds
5939	18402	31118	2.21	5.0E-90	Z18411.1	NT	H. sapiens mRNA encoding phospholipase c
7267	19795	32651	2.56	5.0E-90	AF113708.1	NT	Homo sapiens angiotensin 4 (ANG-4) mRNA, partial cds
7267	19795	32652	2.56	5.0E-90	AF113708.1	NT	Homo sapiens angiotensin 4 (ANG-4) mRNA, partial cds
7584	20081	32937	13.89	5.0E-90	4557258	NT	Homo sapiens adenylyl cyclase 9 (ADCY9) mRNA
8234	20775	33697	4.57	5.0E-90	11345483	NT	Homo sapiens hypothetical protein FLJ13222 (FLJ13222), mRNA
9598	22098	35081	1.24	5.0E-90	11419429	NT	Homo sapiens similar to ecdysectic pyrophosphatase/phosphodiesterase 3 (H. sapiens) (LOC63214), mRNA
10181	22878	35669	0.71	5.0E-90	AF123303.1	NT	Homo sapiens calcium-binding transporter mRNA, partial cds
10311	22805	35797	0.53	5.0E-90	11417118	NT	Homo sapiens KIAA0433 protein (KIAA0433), mRNA
10311	22805	35798	0.53	5.0E-90	11417118	NT	Homo sapiens KIAA0433 protein (KIAA0433), mRNA
10343	22837	35832	8.78	5.0E-90	11433721	NT	Homo sapiens ATPase, aminophospholipid transporter-like, Class I, type 8A, member 2 (ATP8A2), mRNA
10399	22893	35887	0.51	5.0E-90	7662051	NT	Homo sapiens KIAA0317 gene product (KIAA0317), mRNA
10399	22893	35888	0.51	5.0E-90	7662051	NT	Homo sapiens KIAA0317 gene product (KIAA0317), mRNA
10795	23318	36328	3.38	5.0E-90	D49387.1	NT	Human mRNA for NADP dependent leukotriene b4 12-hydroxydehydrogenase, partial cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12421	24607		1.6	5.0E-90	AB011389.1	NT	Homo sapiens gene for AF-6, complete cds
12471	24596		5.4	5.0E-90	A1523366.1	EST_HUMAN	ar78h05.x1 Barstead aorta HPLURB8 Homo sapiens cDNA clone IMAGE:2128761 3'
324	12878	25466	1.61	4.0E-90	AF231920.1	NT	Homo sapiens chromosome 21 unknown mRNA
324	12878	25467	1.61	4.0E-90	AF231920.1	NT	Homo sapiens chromosome 21 unknown mRNA
1125	13728	26239	4.34	4.0E-90	4505316	NT	Homo sapiens myosin phosphatase, target subunit 1 (MYPT1), mRNA
1727	14318	26861	8.55	4.0E-90	X99033.1	NT	H sapiens gene encoding discoidin receptor tyrosine kinase, exon 16
3024	15640	28117	0.97	4.0E-90	AF007544.1	NT	Homo sapiens prostatic-specific membrane antigen (PSM) gene, complete cds
4761	17342	28790	3.77	4.0E-90	DB7675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
4915	17490	29644	2.2	4.0E-90	AB03070.1	NT	Homo sapiens mRNA for KIAA1244 protein, partial cds
4943	17518	29660	1.62	4.0E-90	M95967.1	NT	Human prothrombin converting enzyme (NEC2) gene, exon 8
5096	17669		0.7	3.0E-90	A1370786.1	EST_HUMAN	qz89d08.x1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:2041743 3' similar to gb:M31470 RAS-LIKE PROTEIN TC10 (HUMAN).
7794	20337	33244	1.07	3.0E-90	BF516168.1	EST_HUMAN	U1-HBW1-emb-y-04-0-U1.s1 NCI_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3083839 3'
7794	20337	33245	1.07	3.0E-90	BF516168.1	EST_HUMAN	U1-HBW1-emb-y-04-0-U1.s1 NCI_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3083839 3'
11491	23940	37011	33.84	3.0E-90	BE563833.1	EST_HUMAN	601335244F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3689147 5'
230	12890	26376	4.32	2.0E-90	BE537913.1	EST_HUMAN	601067378F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3453834 5'
1215	13815	26329	16.29	2.0E-90	5031748	NT	Homo sapiens high-mobility group (nonhistone chromosomal) protein 17 (HMG17), mRNA
1215	13815	26330	16.29	2.0E-90	5031748	NT	Homo sapiens lymphocyte antigen 75 (LY75) mRNA, and translated products
2420	14988		1.78	2.0E-90	4605052	NT	Homo sapiens high-mobility group (nonhistone chromosomal) protein 17 (HMG17), mRNA
3912	16510	28972	2.37	2.0E-90	A138213.1	EST_HUMAN	qc54c02.x1 Soares_placenta_8tc6weeks_2NbHP868W Homo sapiens cDNA clone IMAGE:1713410 3'
4798	17376	28827	1.16	2.0E-90	A9006627.1	NT	similar to SW.OLF3_MOUSE P23275 OLFACTORY RECEPTOR OR3 ;
5035	17609	30053	10.95	2.0E-90	5729855	NT	Homo sapiens mRNA for KIAA0289 gene, partial cds
5948	18569	31300	0.72	2.0E-90	11525901	NT	Homo sapiens GRB2-related adaptor protein (GRAP) mRNA
5948	18569	31301	0.72	2.0E-90	11525901	NT	Homo sapiens Rap2 interacting protein 8 (RPIP8), mRNA
5955	18577	31311	4.78	2.0E-90	AW672686.1	EST_HUMAN	ba49d05.y3 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:2899881 5' similar to TR:O75208 O75208 HYPOTHETICAL 35.5 KD PROTEIN ;
9705	22204	35176	8.36	2.0E-90	11427320	NT	Homo sapiens similar to laminin receptor 1 (67KO, ribosomal protein SA) (H. sapiens) (LOC63484), mRNA
9705	22204	35177	8.36	2.0E-90	11427320	NT	Homo sapiens similar to laminin receptor 1 (67KO, ribosomal protein SA) (H. sapiens) (LOC63484), mRNA
9870	22367	35344	0.92	2.0E-90	AU118985.1	EST_HUMAN	AU118985 HEMBA1 Homo sapiens cDNA clone HEMBA1004795 5'
9870	22367	35345	0.92	2.0E-90	AU118985.1	EST_HUMAN	AU118985 HEMBA1 Homo sapiens cDNA clone HEMBA1004795 5'
11345	23043	36053	4.12	2.0E-90	11024711	NT	Homo sapiens myosin, heavy polypeptide 4, skeletal muscle (MYH4), mRNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
298	12954	25443	3.2	1.0E-90	4502166	NT	Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA
397	15386	25533	2.02	1.0E-90	AF231920.1	NT	Homo sapiens chromosome 21 unknown mRNA
398	15386	25533	1.38	1.0E-90	AF231920.1	NT	Homo sapiens chromosome 21 unknown mRNA
724	13344	25835	1.49	1.0E-90	AJ237589.1	NT	Homo sapiens mRNA for T-box transcription factor (TBX20 gene), partial
724	13344	25836	1.49	1.0E-90	AJ237589.1	NT	Homo sapiens mRNA for T-box transcription factor (TBX20 gene), partial
759	13378	25874	13.32	1.0E-90	AF284750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
759	13378	25875	13.32	1.0E-90	AF284750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
1149	13752		3.05	1.0E-90	4507828	NT	Homo sapiens Kruppel-like factor 7 (ubiquitous) (KLF7), mRNA
1349	13944	26467	2.46	1.0E-90	AF086154.1	NT	Homo sapiens protein phosphatase 2A BR gamma subunit gene, exon 3
1349	13944	26468	2.46	1.0E-90	AF086154.1	NT	Homo sapiens protein phosphatase 2A BR gamma subunit gene, exon 3
1707	14300		1.38	1.0E-90	BE378884.1	EST_HUMAN	601159563F2 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3511118 5'
1946	14530	27086	2.82	1.0E-90	11420514	NT	Homo sapiens similar to SALL1 (sal (Drosophila)-like (LOC57167), mRNA
2878	15496	27987	7.6	1.0E-90	6003720	NT	Homo sapiens chromosome 8 open reading frame 2 (C8ORF2), mRNA
3978	16516	28980	0.98	1.0E-90	AB020710.1	NT	Homo sapiens mRNA for KIAA0903 protein, partial cds
3978	16516	28981	0.98	1.0E-90	AB020710.1	NT	Homo sapiens mRNA for KIAA0903 protein, partial cds
4514	17098	29545	1.94	1.0E-90	AF167340.1	NT	Homo sapiens soluble interleukin 1 receptor accessory protein (IL1RAP) gene, exon 8, alternative exons 9 and complete cds, alternatively spliced
5855	18478	31201	1.98	1.0E-90	AB014533.1	NT	Homo sapiens mRNA for KIAA0633 protein, partial cds
6002	18622	31357	0.95	1.0E-90	11426910	NT	Homo sapiens KIAA0623 gene product (KIAA0623), mRNA
7133	19473	32293	0.68	1.0E-90	U91834.1	NT	Human retine-derived POU-domain factor-1 mRNA, complete cds
7685	20177	33064	2.52	1.0E-90	11426758	NT	Homo sapiens solute carrier family 1 (high affinity aspartate/glutamate transporter), member 6 (SLC1A6), mRNA
8755	21284	34214	4.17	1.0E-90	11422086	NT	Homo sapiens brefeldin A-inhibited guanine nucleotide-exchange protein 2 (BIG2), mRNA
9217	21734		0.97	1.0E-90	AF163864.1	NT	Homo sapiens SNCA isoform (SNCA) gene, complete cds, alternatively spliced
9239	21765	34712	1.33	1.0E-90	11422109	NT	Homo sapiens CGI-15 protein (LOC51006), mRNA
9239	21765	34713	1.33	1.0E-90	11422109	NT	Homo sapiens CGI-15 protein (LOC51006), mRNA
4274	16860	28909	6.54	8.0E-91	D12234.1	EST_HUMAN	HUM0005381 Liver HepG2 cell line. Homo sapiens cDNA clone s381 3'
8248	20769	33708	2.74	7.0E-91	11419234	NT	Homo sapiens makorin, ring finger protein, 1 (MKRN1), mRNA
10201	22866	35890	0.74	7.0E-91	A1904151.1	EST_HUMAN	GM-BT043-090289-075 BT043 Homo sapiens cDNA
3521	16126	28606	1.52	5.0E-91	AA702784.1	EST_HUMAN	280B04.s1 Soares fetal liver spleen, INFLS S1 Homo sapiens cDNA clone IMAGE:448015 3'
4614	17197	28643	1.21	5.0E-91	AU143539.1	EST_HUMAN	AU143539 Y79AA1 Homo sapiens cDNA clone Y79AA1002087 5'
4614	17197	28644	1.21	5.0E-91	AU143539.1	EST_HUMAN	AU143539 Y79AA1 Homo sapiens cDNA clone Y79AA1002087 5'
4931	17508	28952	0.66	5.0E-91	7110634	NT	Homo sapiens chromosome 22 open reading frame 5 (C22ORF5), mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4831	17506	28953	0.66	5.0E-91	7110634	NT	Homo sapiens chromosome 22 open reading frame 5 (C22ORF5), mRNA
6728	19323	32128	1.06	5.0E-91	A1879995.1	EST_HUMAN	eu49709.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2518121 3' similar to SW:ASPG FLAME Q47898 N4-(BETA-N-ACETYLGLUCOSAMINYL)-L-ASPARAGINASE PRECURSOR ;
8147	20888	33601	1.52	5.0E-91	BF314682.1	EST_HUMAN	601801624F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4130833 5'
8695	21234	34155	1.4	5.0E-91	AV649878.1	EST_HUMAN	AV649878 GLC Homo sapiens cDNA clone G1CBYF08 3'
8695	21234	34156	1.4	5.0E-91	AV649878.1	EST_HUMAN	AV649878 GLC Homo sapiens cDNA clone G1CBYF08 3'
12443	24579		1.76	5.0E-91	A1193596.1	EST_HUMAN	q97011.x1 Soares_fetal_lung_NbHL 19W Homo sapiens cDNA clone IMAGE:1744365 3' similar to contains MIR.b2 MIR MIR repetitive element ;
3236	15948	28328	1.25	4.0E-91	AF156776.1	NT	Homo sapiens lysophosphatidic acid acyltransferase-delta (LPAAAT-delta) mRNA, complete cds
3236	15948	28329	1.25	4.0E-91	AF156776.1	NT	Homo sapiens lysophosphatidic acid acyltransferase-delta (LPAAAT-delta) mRNA, complete cds
10810	23333	36346	3.96	4.0E-91	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
11882	24229	31001	3.09	4.0E-91	M77994.1	EST_HUMAN	EST01579 Hippocampus, Stratagene (cat. #836205) Homo sapiens cDNA clone HHCMC60 similar to Retrovirus-related gag polyprotein
11882	24229	31047	3.09	4.0E-91	M77994.1	EST_HUMAN	EST01579 Hippocampus, Stratagene (cat. #836205) Homo sapiens cDNA clone HHCMC60 similar to Retrovirus-related gag polyprotein
12181	24417	30947	1.36	4.0E-91	M77994.1	EST_HUMAN	EST01579 Hippocampus, Stratagene (cat. #836205) Homo sapiens cDNA clone HHCMC60 similar to Retrovirus-related gag polyprotein
12181	24417	30948	1.36	4.0E-91	M77994.1	EST_HUMAN	EST01579 Hippocampus, Stratagene (cat. #836205) Homo sapiens cDNA clone HHCMC60 similar to Retrovirus-related gag polyprotein
1660	14253	26787	4.64	3.0E-91	11430183	NT	Homo sapiens solute carrier family 4, anion exchanger, member 3 (SLC4A3), mRNA
1660	14253	26788	4.64	3.0E-91	11430183	NT	Homo sapiens solute carrier family 4, anion exchanger, member 3 (SLC4A3), mRNA
3383	15992	28470	1.4	3.0E-91	AL163283.2	NT	Homo sapiens chromosome 21 segment HS21C083
3509	16114	28592	3.17	3.0E-91	AB033104.1	NT	Homo sapiens mRNA for KIAA1278 protein, partial cds
3509	16114	28593	3.17	3.0E-91	AB033104.1	NT	Homo sapiens mRNA for KIAA1278 protein, partial cds
3856	16454	28918	1.2	3.0E-91	AF084530.1	NT	Homo sapiens cyclin-D binding Myb-like protein mRNA, complete cds
4693	17275	29722	4.36	3.0E-91	M30938.1	NT	Human Ku (p70/p80) subunit mRNA, complete cds
5115	17687	30124	1.19	3.0E-91	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
5115	17687	30125	1.19	3.0E-91	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
5865	18487	31211	1.5	3.0E-91	11434964	NT	Homo sapiens epididymal secretory protein (19.5kD) (HE1), mRNA
6446	18048		2.85	3.0E-91	4502740	NT	Homo sapiens cyclin-dependent kinase 6 (CDK6) mRNA
6697	19283	32097	4.48	3.0E-91	11497611	NT	Homo sapiens gamma-aminobutyric acid (GABA) B receptor, 1 (GABBR1), transcript variant 2, mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6897	19293	32098	4.48	3.0E-91	11497611	NT	Homo sapiens gamma-aminobutyric acid (GABA) B receptor, 1 (GABBR1), transcript variant 2, mRNA
7634	20146	33028	4.04	3.0E-91	U86959.1	NT	Human L-type calcium channel beta-1 subunit (CACNLB1) gene, exons 10 and 11
7634	20146	33029	4.04	3.0E-91	U86959.1	NT	Human L-type calcium channel beta-1 subunit (CACNLB1) gene, exons 10 and 11
7687	20429	33338	0.46	3.0E-91	6601589	NT	Homo sapiens ankyrin-like with transmembrane domains 1 (ANKTM1), mRNA
8706	21245	34168	2.6	3.0E-91	D18494.1	NT	Human mRNA for very low density lipoprotein receptor, complete cds
9212	21729	34872	0.8	3.0E-91	AB011166.1	NT	Homo sapiens mRNA for KIAA0594 protein, partial cds
12504	18025	30406	9.31	3.0E-91	AF169555.1	NT	Homo sapiens beta-ureidopropionase (BUP1) gene, exon 6
12504	18025	30407	9.31	3.0E-91	AF169555.1	NT	Homo sapiens beta-ureidopropionase (BUP1) gene, exon 6
52	12732	25199	2.37	1.0E-91	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
1288	13883	26408	6.6	1.0E-91	AW449746.1	EST_HUMAN	UI-H-B13-aks-d01-Q.U1.s1 NCI_CGAP_Sub5 Homo sapiens cDNA clone IMAGE:2735280 3'
5608	18237	30687	0.84	1.0E-91	11434402	NT	Homo sapiens hypothetical protein PRO1855 (PRO1855), mRNA
6930	19589	32419	1.76	1.0E-91	BF348182.1	EST_HUMAN	602022088F1 NCI_CGAP_Bin87 Homo sapiens cDNA clone IMAGE:4157804 5'
6930	19589	32420	1.76	1.0E-91	BF348182.1	EST_HUMAN	602022088F1 NCI_CGAP_Bin87 Homo sapiens cDNA clone IMAGE:4157804 5'
1284	13880	26402	9.55	9.0E-92	AJ001689.1	NT	Homo sapiens NKG2D gene, exon 10
1284	13880	26403	9.55	9.0E-92	AJ001689.1	NT	Homo sapiens NKG2D gene, exon 10
5389	17947	30359	0.59	9.0E-92	AB020640.1	NT	Homo sapiens mRNA for KIAA0833 protein, partial cds
5654	18281	30760	4.15	9.0E-92	J03007.1	NT	Human Na ⁺ K ⁺ ATPase alpha-subunit mRNA, partial cds
5790	18415	31131	2.53	9.0E-92	11427149	NT	Homo sapiens hypothetical protein FLJ20260 (FLJ20260), mRNA
6581	19178	31979	4	9.0E-92	AF310105.1	NT	Homo sapiens NALP1 mRNA, complete cds
7798	20341	33249	0.75	9.0E-92	AJ250566.1	NT	Homo sapiens partial TM4SF2 gene for tetraspanin protein, exon 5
7798	20341	33250	0.75	9.0E-92	AJ250566.1	NT	Homo sapiens partial TM4SF2 gene for tetraspanin protein, exon 5
8315	20856	33781	1.11	9.0E-92	AB040945.1	NT	Homo sapiens mRNA for KIAA1512 protein, partial cds
8315	20856	33782	1.11	9.0E-92	AB040945.1	NT	Homo sapiens mRNA for KIAA1512 protein, partial cds
9198	21715	34659	1.84	9.0E-92	11422086	NT	Homo sapiens brefeldin A-inhibited guanine nucleotide-exchange protein 2 (BIG2), mRNA
96	12772	25254	11	8.0E-92	W26387.1	EST_HUMAN	26f3 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA
307	12862	25451	6.03	8.0E-92	BE365363.1	EST_HUMAN	601273513F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3614667 5'
1860	14448	27005	1.03	8.0E-92	11434722	NT	Homo sapiens diacylglycerol kinase, gamma (90kD) (DGKG), mRNA
1860	14448	27006	1.03	8.0E-92	11434722	NT	Homo sapiens diacylglycerol kinase, gamma (90kD) (DGKG), mRNA
4306	16892	28335	0.96	8.0E-92	AA090187.1	EST_HUMAN	om13e02.s1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1540922 3' similar to contains L1.b2 L1 repetitive element ;
5265	17827	30251	2.02	8.0E-92	AW157571.1	EST_HUMAN	au83h08.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2782811 3' similar to TR:060302 KIAA0555 PROTEIN ; contains element MER22 repetitive element ;
5591	18222	30671	0.76	8.0E-92	AB048820.1	NT	Homo sapiens mRNA for KIAA1600 protein, partial cds

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5690	18316	30815	0.96	8.0E-92	AF264717.1	NT	Homo sapiens FYVE domain-containing dual specificity protein phosphatase FYVE-DSP2 mRNA, complete cds
6666	19262	32066	1.25	8.0E-92	AJ000979.1	NT	Homo sapiens MCP-4 gene
6669	19265	32069	0.72	8.0E-92	AF179428.1	NT	Homo sapiens DNA polymerase zeta catalytic subunit variant 1 (REV3L) mRNA, complete cds
7747	20255	33149	5.08	8.0E-92	X69536.1	NT	H. sapiens gene for inter-alpha-trypsin inhibitor heavy chain H1, exons 7-8
7747	20255	33150	5.08	8.0E-92	X69536.1	NT	H. sapiens gene for inter-alpha-trypsin inhibitor heavy chain H1, exons 7-8
8035	20577		0.88	8.0E-92	11416961	NT	Homo sapiens AIM-1 protein (LOC51151), mRNA
8364	20904	33822	4.98	8.0E-92	L04193.1	NT	Human lens membrane protein (mp19) gene, exon 11
8364	20904	33823	4.98	8.0E-92	L04193.1	NT	Human lens membrane protein (mp19) gene, exon 11
8461	21001	33918	0.67	8.0E-92	11428569	NT	Homo sapiens transcription termination factor, RNA polymerase II (TTF2), mRNA
8892	21530	34459	2.47	8.0E-92	AB014511.1	NT	Homo sapiens mRNA for KIAA0611 protein, partial cds
9939	22434	35410	1.78	8.0E-92	Y13829.1	NT	Homo sapiens mRNA for MBNL protein
10683	23214	36228	5.17	8.0E-92	AF074393.1	NT	Homo sapiens nuclear mitogen- and stress-activated protein kinase-1 (MSK1) mRNA, complete cds
11239	23770	36828	2.58	8.0E-92	4503340	NT	Homo sapiens dihydropyrimidine S-succinyltransferase (E2 component of 2-oxo-glutarate complex) (DLST) mRNA
257	15411	25402	1.61	7.0E-92	AB018301.1	NT	Homo sapiens mRNA for KIAA0758 protein, partial cds
257	15411	25403	1.61	7.0E-92	AB018301.1	NT	Homo sapiens mRNA for KIAA0758 protein, partial cds
617	13244		1.09	7.0E-92	AF007822.1	NT	Homo sapiens cytoplasmic Sepsase truncated isoform mRNA, complete cds
1323	13917	28439	3.02	7.0E-92	4502384	NT	Homo sapiens B-cell CLL/lymphoma 7b (BCL7B) mRNA
2229	14804	27375	1.25	7.0E-92	5031570	NT	Homo sapiens ARP2 (actin-related protein 2, yeast) homolog (ACTR2), mRNA
2229	14804	27376	1.25	7.0E-92	5031570	NT	Homo sapiens ARP2 (actin-related protein 2, yeast) homolog (ACTR2), mRNA
2599	15161	27729	1.45	7.0E-92	AF167706.1	NT	Homo sapiens cysteine-rich repeat-containing protein S52 precursor, mRNA, complete cds
2751	15306	27870	2.14	7.0E-92	6005738	NT	Homo sapiens NRAS-related gene (D1S155E), mRNA
2781	15334	27904	1.03	7.0E-92	AB031007.1	NT	Homo sapiens DNA, MHC class I region, 7.1 ancestral haplotype
3389	18003	28474	0.65	7.0E-92	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
3389	18003	28475	0.65	7.0E-92	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
4887	17269	29718	1.08	7.0E-92	S71824.1	NT	N-CAM=145 kDa neural cell adhesion molecule [human, small cell lung cancer cell line OS2-R, mRNA, 2980 nt]
4887	17269	29719	1.08	7.0E-92	S71824.1	NT	N-CAM=145 kDa neural cell adhesion molecule [human, small cell lung cancer cell line OS2-R, mRNA, 2980 nt]
5147	17717	30148	1.15	7.0E-92	AL163281.2	NT	Homo sapiens chromosome 21 segment HS21C081
5350	17910	30325	1.12	7.0E-92	4508118	NT	Homo sapiens prospero-related homeobox 1 (PROX1) mRNA
5468	18101	30419	4.93	7.0E-92	AA446206.1	EST_HUMAN	zw68d12.1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:781175 5'

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1631	14223		1.18	5.0E-92	BE390882.1	EST_HUMAN	601283012F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3805018 5'
2783	15346	27915	2.12	3.0E-92	BE009714.1	EST_HUMAN	601501242F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3802939 5'
6036	18655	31397	7.84	3.0E-92	AA378336.1	EST_HUMAN	EST91020 Synovial sarcoma Homo sapiens cDNA 5' end similar to ribosomal protein S13
10845	23177	36189	2.86	3.0E-92	X15804.1	NT	Human mRNA for alpha-actinin
10845	23177	36190	2.86	3.0E-92	X15804.1	NT	Human mRNA for alpha-actinin
12358	25103		1.76	3.0E-92	BF367138.1	EST_HUMAN	RC1-GN0021-240800-012-e11 GN0021 Homo sapiens cDNA
28	12707	25164	1.57	2.0E-92	4501898	NT	Homo sapiens activin A receptor, type IIB (ACVR2B) mRNA
153	12816	25304	29.76	2.0E-92	AF154830.1	NT	Homo sapiens carbamyl phosphate synthetase I mRNA, complete cds
181	12851	25334	3.47	2.0E-92	11422846	NT	Homo sapiens hypothetical protein dJ462023.2 (DJ462023.2), mRNA
191	12851	25335	3.47	2.0E-92	11422846	NT	Homo sapiens hypothetical protein dJ462023.2 (DJ462023.2), mRNA
779	13398	25800	12.47	2.0E-92	BE289190.1	EST_HUMAN	601118337F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3028304 5'
779	13398	25901	12.47	2.0E-92	BE289190.1	EST_HUMAN	601118337F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3028304 5'
1752	14342		1.42	2.0E-92	S78653.1	NT	mg-mas-related [human, Genomic, 2416 nt]
1980	14563	27122	4.27	2.0E-92	A1818119.1	EST_HUMAN	Q12844 BREAKPOINT CLUSTER REGION PROTEIN ;
1980	14563	27123	4.27	2.0E-92	A1818119.1	EST_HUMAN	Q12844 BREAKPOINT CLUSTER REGION PROTEIN ;
2092	14672	27242	4.82	2.0E-92	4506880	NT	Homo sapiens syndecan 4 (amphiglycan, ryndocan) (SDC4) mRNA
2683	15241	27809	21.03	2.0E-92	6912457	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
2857	14287	26823	1.16	2.0E-92	11418424	NT	Homo sapiens collagen, type XII, alpha 1 (COL12A1), mRNA
2857	14287	26824	1.16	2.0E-92	11418424	NT	Homo sapiens collagen, type XII, alpha 1 (COL12A1), mRNA
3673	16274	28740	1.13	2.0E-92	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
3673	16274	28741	1.13	2.0E-92	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
3749	16350	28818	6.13	2.0E-92	5803180	NT	Homo sapiens stress-induced-phosphoprotein 1 (Hsp70/Hsp80-organizing protein) (STIP1), mRNA
4376	16963	29409	1.48	2.0E-92	M10976.1	NT	Human endogenous retroviral DNA (4-1), complete retroviral segment
4868	17444	29895	0.75	2.0E-92	AF136523.1	NT	Homo sapiens bile salt export pump (BSEP) mRNA, complete cds
5133	17705		4.94	2.0E-92	AL040437.1	EST_HUMAN	DKFZp434C0414.1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434C0414 5'
6444	19046		0.68	2.0E-92	4504756	NT	Homo sapiens integrin, alpha L (antigen CD11A (p180), lymphocyte function-associated antigen 1; alpha polypeptide) (ITGAL) mRNA
6727	19321	32126	2.75	2.0E-92	AB028961.1	NT	Homo sapiens mRNA for KIAA1068 protein, partial cds
7499	20005		0.75	2.0E-92	U67760.1	NT	Human NPY Y1-like receptor pseudogene mRNA, complete cds
8789	21328	34253	1.78	2.0E-92	AW340174.1	EST_HUMAN	h02h02.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2908371 3' similar to TR:O02711 O02711 PRO-POL-DUTPASE POLYPROTEIN ;

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10939	23171	36182	6.98	2.0E-92	11434900	NT	Homo sapiens thyroid stimulating hormone receptor (TSHR), mRNA
10926	23444	36465	1.92	2.0E-92	5803103	NT	Homo sapiens male-specific lethal-3 (Drosophila)-like 1 (MSL3L1), mRNA
11022	23536	36571	1.84	2.0E-92	AW836290.1	EST_HUMAN	GM4-LT0028-161299-062-g06.LT0028 Homo sapiens cDNA
11022	23536	36572	1.64	2.0E-92	AW836290.1	EST_HUMAN	GM4-LT0028-161299-062-g06.LT0028 Homo sapiens cDNA
12248	24459	30960	2.99	2.0E-92	AB029016.1	NT	Homo sapiens mRNA for KIAA1093 protein, partial cds
12533	15241	27809	96.37	2.0E-92	8912457	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
1890	14475	27034	1.6	1.0E-92	R78078.1	EST_HUMAN	y80e08.r1 Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:145574 5'
1890	14475	27035	1.6	1.0E-92	R78078.1	EST_HUMAN	y80e08.r1 Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:145574 5'
2118	14696	27265	10.49	1.0E-92	4506668	NT	Homo sapiens ribosomal protein, large, P1 (RPLP1) mRNA
8189	20730	33642	1.01	1.0E-92	BE439625.1	EST_HUMAN	HTM1-288F HTM1 Homo sapiens cDNA
9091	21627	34563	4.16	1.0E-92	A1380356.1	EST_HUMAN	ig01b02.x1 NCL_CGAP_CLL.1 Homo sapiens cDNA clone IMAGE:2107467 3' similar to SW:PTNF_HUMAN Q16825 PROTEIN-TYROSINE PHOSPHATASE D1 ;contains Alu repetitive element;contains element MER17 repetitive element
9091	21627	34564	4.16	1.0E-92	A1380356.1	EST_HUMAN	ig01b02.x1 NCL_CGAP_CLL.1 Homo sapiens cDNA clone IMAGE:2107467 3' similar to SW:PTNF_HUMAN Q16825 PROTEIN-TYROSINE PHOSPHATASE D1 ;contains Alu repetitive element;contains element MER17 repetitive element
2076	14656	27228	3.52	9.0E-93	AU121681.1	EST_HUMAN	AU121681 MAMMA1 Homo sapiens cDNA clone MAMMA1000738 5'
2086	14667		10.76	9.0E-93	AA316723.1	EST_HUMAN	EST188414 HCC cell line (metastasis to liver in mouse) II Homo sapiens cDNA 5' end similar to ribosomal protein L29
2673	15231		1.18	9.0E-93	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
3674	18275	28742	1.02	9.0E-93	BE388571.1	EST_HUMAN	601281867F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3603832 5'
11501	23950		18.44	9.0E-93	11418526	NT	Homo sapiens ribosomal protein L10a (RPL10A), mRNA
6705	19300	32104	4.23	8.0E-93	BF030364.1	EST_HUMAN	601460521F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3663908 5'
267	12924	25410	8.56	7.0E-93	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
3111	15726	28197	0.59	6.0E-93	11526176	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1), mRNA
6782	19373	32189	1.17	6.0E-93	AB033093.1	NT	Homo sapiens mRNA for KIAA1267 protein, partial cds
6996	19494	32315	1.37	6.0E-93	AF095771.1	NT	Homo sapiens PTH-responsive osteosarcoma B1 protein (B1) mRNA, complete cds
1423	14016	28545	1.92	5.0E-93	AB014511.1	NT	Homo sapiens mRNA for KIAA0611 protein, partial cds
1453	14045	26574	6.35	5.0E-93	A674184.1	EST_HUMAN	wc08c08.x1 NCL_CGAP_P128 Homo sapiens cDNA clone IMAGE:2314670 3'
1453	14045	26575	6.35	5.0E-93	A674184.1	EST_HUMAN	wc08c08.x1 NCL_CGAP_P128 Homo sapiens cDNA clone IMAGE:2314670 3'
1523	14115		0.97	5.0E-93	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
1862	15452	27008	0.9	5.0E-93	AJ297710.1	NT	Homo sapiens mRNA for CDC2L5 protein kinase, (CDC2L5 gene), isoform 2
3270	15882	28364	2.6	5.0E-93	X04201.1	NT	Human skeletal muscle 1.3 kb mRNA for tropomyosin

Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5967	18588	31323	0.93	5.0E-93	M22878.1	NT	Human somatic cytochrome c (HC1) processed pseudogene, complete cds
8257	18866		1.49	5.0E-93	AF045555.1	NT	Homo sapiens wbscr1 (WBSOCR1) and wbscr5 (WBSOCR5) genes, complete cds, alternatively spliced and replication factor C subunit 2 (RFC2) gene, complete cds
7700	20209	33098	3.68	5.0E-93	AF087136.1	NT	Homo sapiens protein phosphatase-1 regulatory subunit 7 (PPP1R7) gene, exon 11, complete cds and alternatively spliced product
8541	21080	34000	0.68	5.0E-93	4557528	NT	Homo sapiens discs, large (Drosophila) homolog 2 (chapsyn-110) (DLG2) mRNA
8541	21080	34001	0.68	5.0E-93	4557528	NT	Homo sapiens discs, large (Drosophila) homolog 2 (chapsyn-110) (DLG2) mRNA
9541	22041	35002	2.26	5.0E-93	AF274863.1	NT	Homo sapiens secretory pathway component Sec31B-1 mRNA, alternatively spliced, complete cds
9721	22219	35194	2.87	5.0E-93	5032156	NT	Homo sapiens TAR (HIV) RNA-binding protein 1 (TARBP1) mRNA
9882	22477	35459	1.58	5.0E-93	AF068313.2	NT	Homo sapiens WSB1 protein (WSB1) mRNA, complete cds
10705	23234	38247	2.14	5.0E-93	11438598	NT	Homo sapiens nucleobindin 2 (NUCB2) mRNA
12145	24731	30858	2.11	5.0E-93	11417877	NT	Homo sapiens gamma-glutamyltransferase 1 (GGT1) mRNA
91	12787		6.55	4.0E-93	AA459933.1	EST HUMAN	zfx509 st Soares, testis, NHT Homo sapiens cDNA clone IMAGE:795688 3' similar to SW:CLPA_RAT
470	13103	25595	1.58	4.0E-93	4557879	NT	P37397 CALPONIN, ACIDIC ISOFORM :
470	13103	25598	1.58	4.0E-93	4557879	NT	Homo sapiens interferon gamma receptor 1 (IFNGR1) mRNA
804	13421	25928	2.39	4.0E-93	7657454	NT	Homo sapiens pascadillo (zabrafish) homolog 1, containing BRCT domain (PES1), mRNA
804	13421	25927	2.39	4.0E-93	7657454	NT	Homo sapiens pascadillo (zabrafish) homolog 1, containing BRCT domain (PES1), mRNA
1225	13824	26339	1.5	4.0E-93	8923658	NT	Homo sapiens hypothetical protein FLJ20731 (FLJ20731), mRNA
2020	14602	27167	5.25	4.0E-93	AF047677.1	NT	Homo sapiens dystrophin (DMD) gene, deletion breakpoints 1-3 in intron 5
2638	15197	27771	1.41	4.0E-93	7656972	NT	Homo sapiens TNF-inducible protein CG12-1 (CG12-1), mRNA
3624	16227	28705	0.8	4.0E-93	7705396	NT	Homo sapiens tumor antigen SLP-8p (HCC8), mRNA
4122	16715	28171	2.14	4.0E-93	4504654	NT	Homo sapiens interleukin 18 receptor 1 (IL18R1) mRNA
5171	18227	28705	0.86	4.0E-93	7705396	NT	Homo sapiens tumor antigen SLP-8p (HCC8), mRNA
5825	18449	31172	5.27	4.0E-93	T46964.1	EST HUMAN	y694c12.1 Stratogene liver (8937224) Homo sapiens cDNA clone IMAGE:78838 5' similar to similar to SP:A44397 A44397 SERUM RESPONSE ELEMENT-BINDING PROTEIN SRE-ZBP - HUMAN ,
11013	23527	36563	14.54	4.0E-93	AF092051.1	EST_HUMAN	AV092051 GKC Homo sapiens cDNA clone GKCDRF07 5'
3713	16314	28781	8.68	3.0E-93	BF690630.1	EST_HUMAN	802248554F1 NIH_MGC_82 Homo sapiens cDNA clone IMAGE:4332036 5'
3713	16314	28782	8.68	3.0E-93	BF690630.1	EST_HUMAN	802248554F1 NIH_MGC_82 Homo sapiens cDNA clone IMAGE:4332036 5'
4319	16905		5.51	3.0E-93	AF225896.1	NT	Homo sapiens tensin mRNA, complete cds
6679	19275	32079	1.28	3.0E-93	11426182	NT	Homo sapiens GCN5 (general control of amino-acid synthesis, yeast, homolog)-like 2 (GCN5L2), mRNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10880	23212	36223	4.85	3.0E-93	AB24829.1	EST_HUMAN	w602405.x1 NCL CGAP_G06 Homo sapiens cDNA clone IMAGE:2304489 3'
204	12865	25349	26.58	2.0E-93	AB015610.1	NT	Chlorococcus aethiops mRNA for ribosomal protein S4X, complete cds
204	12865	25350	26.58	2.0E-93	AB015610.1	NT	Chlorococcus aethiops mRNA for ribosomal protein S4X, complete cds
345	12897	25483	10.26	2.0E-93	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
346	12897	25483	6.69	2.0E-93	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
1857	14250	26784	7.56	2.0E-93	AF225896.1	NT	Homo sapiens tensin mRNA, complete cds
2527	15091	27664	1.01	2.0E-93	BE252982.1	EST_HUMAN	60117586F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3358220 5'
5611	18240	30689	6.13	2.0E-93	AW964385.1	EST_HUMAN	EST1376458 MAGE resequences, MAGE1 Homo sapiens cDNA
5818	18442	31164	1.06	2.0E-93	11430039	NT	Homo sapiens hypothetical protein (LOC51318), mRNA
5832	18456	31177	0.76	2.0E-93	U74313.1	EST_HUMAN	HSU74313 Human chromosome 14 Homo sapiens cDNA clone 1-86
6785	18376		1.21	2.0E-93	AW502002.1	EST_HUMAN	U1HF-BN0-aks-g 09-0-UI-1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3078329 5'
12032	24322		2.49	2.0E-93	AA126735.1	EST_HUMAN	z129c10.s1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:5033346 3'
12119	24378		2.81	2.0E-93	L41825.1	NT	Homo sapiens CYP17 gene, 5' end
12404	24562		5.66	2.0E-93	BF035327.1	EST_HUMAN	60145853F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3862086 5'
107	12783	25265	33.31	1.0E-93	AF238697.1	NT	Homo sapiens CTR1 pseudogene
107	12783	25266	33.31	1.0E-93	AF238697.1	NT	Homo sapiens CTR1 pseudogene
544	13175	25655	7.63	1.0E-93	7657016	NT	Homo sapiens hypothetical protein (DJ328E19.C1.1), mRNA
626	13253	25727	3.51	1.0E-93	AI146755.1	EST_HUMAN	0y64b08.x1 NCL CGAP_CELL1 Homo sapiens cDNA clone IMAGE:1672503 3' similar to TR:Q62384 Q62384 ZINC FINGER PROTEIN ;
805	13519	26037	5.19	1.0E-93	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
1280	13875	26395	6.4	1.0E-93	8923270	NT	Homo sapiens hypothetical protein FLJ20291 (FLJ20291), mRNA
1280	13875	26398	6.4	1.0E-93	8923270	NT	Homo sapiens hypothetical protein FLJ20291 (FLJ20291), mRNA
1389	13983	26509	1.09	1.0E-93	AB046783.1	NT	Homo sapiens mRNA for KIAA1563 protein, partial cds
2375	14945	27518	1.57	1.0E-93	AF231981.1	NT	Homo sapiens long chain polyunsaturated fatty acid elongation enzyme (HELO1) mRNA, complete cds
2503	15067	27641	2.67	1.0E-93	AF055066.1	NT	Homo sapiens MHC class 1 region
2849	13933	26453	1.93	1.0E-93	BE297369.1	EST_HUMAN	601177686F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3532965 5'
2849	13933	26454	1.93	1.0E-93	BE297369.1	EST_HUMAN	601177686F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3532965 5'
2960	15576	28055	1.99	1.0E-93	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
3252	15864		1.51	1.0E-93	AF231981.1	NT	Homo sapiens long chain polyunsaturated fatty acid elongation enzyme (HELO1) mRNA, complete cds
4520	17104	29550	1.82	1.0E-93	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
5755	18381	31092	1.36	1.0E-93	U78509.1	NT	Homo sapiens glucocorticoid receptor (GRL) gene, intron D, exon 5, and intron E
5755	18381	31093	1.36	1.0E-93	U78509.1	NT	Homo sapiens glucocorticoid receptor (GRL) gene, intron D, exon 5, and intron E

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5938	18559	31288	0.99	1.0E-93	AF227138.1	NT	Homo sapiens candidate taste receptor T2R14 gene, complete cds
6074	18691	31437	9.26	1.0E-93	4557792	NT	Homo sapiens neurofibromin 1 (neurofibromatosis, von Recklinghausen disease, Watson disease) (NF1) mRNA
6344	18950	31728	1.02	1.0E-93	7882241	NT	Homo sapiens KIAA0872 gene product (KIAA0872), mRNA
6888	19821	32455	2.18	1.0E-93	11431580	NT	Homo sapiens protein kinase C, beta 1 (PRKCB1), mRNA
7297	19825	32684	5.8	1.0E-93	D42072.1	NT	Human mRNA for NF1 N-isoform-exon11, complete cds
8203	20744	33657	2.4	1.0E-93	AB037832.1	NT	Homo sapiens mRNA for KIAA1411 protein, partial cds
8480	21019	33834	1.1	1.0E-93	Y10183.1	NT	H. sapiens mRNA for MEMO protein
8583	21122	34042	1.26	1.0E-93	AF182032.1	NT	Homo sapiens protein kinase inhibitor gamma (PKIG) mRNA, complete cds
9373	20312	33214	1.64	1.0E-93	AB040918.1	NT	Homo sapiens mRNA for KIAA1485 protein, partial cds
9377	20316	33218	1.28	1.0E-93	AF091385.1	NT	Homo sapiens Tio isoform mRNA, complete cds
9507	22007	34963	4.34	1.0E-93	X13474.1	NT	Human PreA4 gene for Alzheimer's disease A4 amyloid protein precursor (exon 9)
9507	22007	34964	4.34	1.0E-93	X13474.1	NT	Human PreA4 gene for Alzheimer's disease A4 amyloid protein precursor (exon 9)
8641	22141	35108	0.59	1.0E-93	AL049801.1	NT	Novel human gene mapping to chromosome 13, similar to rat RhoGAP
10050	22545	35540	0.51	1.0E-93	11433848	NT	Homo sapiens ryanodine receptor 3 (RYR3), mRNA
11686	24822	30793	1.37	1.0E-93	AI298282.1	EST_HUMAN	qno03c12.x1 NCI_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1880758 3' similar to WP.T1984.4 CE13742
12301	24498		2.08	1.0E-93	AJ230125.1	NT	Homo sapiens GGT1 gene, exon 1
12397	24557		5.43	1.0E-93	11417856	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2), mRNA
12568	24667	30874	1.72	1.0E-93	11417862	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
12584	25080		2.21	1.0E-93	AF240786.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
10484	22878		1.17	8.0E-94	AL183209.2	NT	Homo sapiens chromosome 21 segment HS21C009
4034	16632	29101	2.19	6.0E-94	AF142482.1	NT	Homo sapiens transcription enhancer factor-5 mRNA, complete cds
12524	24640		1.31	8.0E-94	11418351	NT	Homo sapiens mitogen-activated protein kinase 12 (MAPK12), mRNA
5570	18201	30650	3.71	5.0E-94	AB014512.1	NT	Homo sapiens mRNA for KIAA0812 protein, partial cds
5570	18201	30651	3.71	5.0E-94	AB014512.1	NT	Homo sapiens mRNA for KIAA0812 protein, partial cds
6199	18009	31578	6.8	5.0E-94	AA722434.1	EST_HUMAN	z987g06.s1 Soares_fetal_heart_NbHH19W Homo sapiens cDNA clone IMAGE:409594 3'
7081	19653	32491	1.45	5.0E-94	AI015900.1	EST_HUMAN	o83d05.s1 Soares_total_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:1823369 3'
8573	21112	34031	0.78	5.0E-94	BF529115.1	EST_HUMAN	602042163F1 NCI_CGAP_Brn67 Homo sapiens cDNA clone IMAGE:4180023 5'
10852	23373	36391	1.97	5.0E-94	11423962	NT	Homo sapiens adenylyate kinase 2 (AK2), mRNA
10852	23373	36392	1.97	5.0E-94	11423962	NT	Homo sapiens adenylyate kinase 2 (AK2), mRNA
12010	25083	30517	4.36	5.0E-94	T89398.1	EST_HUMAN	Yf08p04.s1 Soares_fetal_liver_spleen_1NfLS Homo sapiens cDNA clone IMAGE:118239 3'
1882	14488		9.28	4.0E-94	L05094.1	NT	Homo sapiens ribosomal protein L27 mRNA, complete cds

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4827	17405	29859	3.19	4.0E-94	A1591312.1	EST_HUMAN	tw11f10.x1 NCL CGAP_Bln52 Homo sapiens cDNA clone IMAGE:2259403 3' similar to TR:Q15265 Q15265 PROTEIN TYROSINE PHOSPHATASE ;
6594	18181	31895	2.35	4.0E-94	11440670	NT	Homo sapiens solute carrier family 22 (organic cation transporter), member 1-like (SLC22A1L), mRNA
6594	18181	31898	2.35	4.0E-94	11440670	NT	Homo sapiens solute carrier family 22 (organic cation transporter), member 1-like (SLC22A1L), mRNA
6982	19490		0.89	4.0E-94	L27386.1	NT	Homo sapiens huntingtin (HD) gene, exon 37
11328	23026	36035	1.8	4.0E-94	11545792	NT	Homo sapiens hypothetical protein FLJ12455 (FLJ12455), mRNA
11598	24041	37110	4	4.0E-94	4507822	NT	Homo sapiens UDP glycosyltransferase 2 family, polypeptide B11 (UGT2B11) mRNA
639	13262	25738	3.74	3.0E-94	AB022785.1	NT	Homo sapiens ASH2L gene, complete cds, similar to Drosophila ash2 gene
750	13370	25864	9.91	3.0E-94	4502508	NT	Homo sapiens complement component 5 (C5) mRNA
1776	14368	26910	1.19	3.0E-94	AF167706.1	NT	Homo sapiens cysteine-rich repeat-containing protein S62 precursor, mRNA, complete cds
1776	14368	26911	1.19	3.0E-94	AF167706.1	NT	Homo sapiens cysteine-rich repeat-containing protein S62 precursor, mRNA, complete cds
1809	14399	26944	5.11	3.0E-94	4557558	NT	Homo sapiens E1A binding protein p300 (EP300) mRNA
5861	18483	31207	4.01	3.0E-94	11496298	NT	Homo sapiens zinc finger protein 277 (ZNF277), mRNA
6289	18907	31678	1.07	3.0E-94	AB011536.1	NT	Homo sapiens mRNA for MEGF2, partial cds
6579	18177	31677	5.19	3.0E-94	11526228	NT	Homo sapiens chromosome 21 open reading frame 18 (C21ORF18), mRNA
8140	20681	33593	0.89	3.0E-94	AF152309.1	NT	Homo sapiens protocadherin alpha 13 (PCDH-alpha13) mRNA, complete cds
8523	21062	33984	3.81	3.0E-94	AB014579.1	NT	Homo sapiens mRNA for KIAA0879 protein, partial cds
9511	22011	34870	7.24	3.0E-94	AF087942.1	NT	Homo sapiens glycogenin-1L mRNA, complete cds
10878	23493	36523	1.64	3.0E-94	4757821	NT	Homo sapiens axonal transport of synaptic vesicles (ATSV) mRNA
11527	23975	37045	1.62	3.0E-94	U26711.1	NT	Human cbl-b truncated form 1 lacking leucine zipper mRNA, complete cds
9687	22166	35140	0.51	2.0E-94	AB10393.1	EST_HUMAN	w130h11.x1 NCL CGAP_Cot6 Homo sapiens cDNA clone IMAGE:2391813 3'
9687	22166	35141	0.51	2.0E-94	AB10393.1	EST_HUMAN	w130h11.x1 NCL CGAP_Cot6 Homo sapiens cDNA clone IMAGE:2391813 3'
180	12823	25311	2.34	1.0E-94	BE295714.1	EST_HUMAN	601175762F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3531038 5'
3125	15739	28207	1.98	1.0E-94	BE253433.1	EST_HUMAN	601111689F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3352559 5'
3125	15739	28208	1.98	1.0E-94	BE253433.1	EST_HUMAN	601111689F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3352559 5'
4450	17036	29480	1.14	1.0E-94	9506692	NT	Homo sapiens hypothetical protein (FLJ20746), mRNA
6223	18832	31606	1.21	1.0E-94	AE000269.1	NT	Escherichia coli K-12 MG1655 section 159 of 400 of the complete genome
6412	19015	31797	1.32	1.0E-94	AL040518.1	EST_HUMAN	DKFZp434G0314_11 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434G0314 5'
6421	19024	31808	0.79	1.0E-94	H08270.1	EST_HUMAN	y87702.r1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:45053 5'
8057	20599	33507	0.56	1.0E-94	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
8057	20599	33508	0.56	1.0E-94	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
9180	21757	34703	2.29	1.0E-94	11428710	NT	Homo sapiens paired box gene 5 (B-cell lineage specific activator protein) (PAX5), mRNA

Table 4

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9702	22201	35173	1.8	1.0E-94	BE780478.1	EST_HUMAN	601488748F1 NIH_MGC_87 Homo sapiens cDNA clone IMAGE:3872099 5'
10945	23481	36483	3.48	1.0E-94	U65590.1	NT	Homo sapiens IL-1 receptor antagonist IL-1Ra (IL-1RN) gene, alternatively spliced forms, complete cds
11197	23702	36753	2.05	1.0E-94	A1272244.1	EST_HUMAN	ap22e02.x1 Schiller oligodendrogloma Homo sapiens cDNA clone IMAGE:1856122 3' similar to TR:Q62845
11592	24035	37104	2.28	1.0E-94	11418871	NT	Q62845 NEURAL CELL ADHESION PROTEIN BIG-2 PRECURSOR. ;
12133	12823	25311	1.34	1.0E-94	BE295714.1	EST_HUMAN	Homo sapiens KIAA0164 gene product (KIAA0164), mRNA
1525	14117	26654	2.12	9.0E-95	AF027302.1	NT	601175762F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3531038 5'
3191	15803	28275	1.15	9.0E-95	7662027	NT	Homo sapiens TNF-alpha stimulated ABC protein (ABC50) mRNA, complete cds
3191	15803	28276	1.15	9.0E-95	7662027	NT	Homo sapiens KIAA0255 gene product (KIAA0255), mRNA
5601	18230	30679	1.59	9.0E-95	X82569.1	NT	M.musculus glyt1 gene (exons 1c and 2)
5601	18230	30680	1.59	9.0E-95	X82569.1	NT	M.musculus glyt1 gene (exons 1c and 2)
8194	20735	33645	1.89	9.0E-95	AF274753.1	NT	Homo sapiens progressive ankylosis-like protein (ANK) mRNA, complete cds
155	12818	25306	10.06	8.0E-95	AF154830.1	NT	Homo sapiens carbamyl phosphate synthetase I mRNA, complete cds
4634	17217	29669	1.92	8.0E-95	A1700998.1	EST_HUMAN	w609e04.x1 NCI CGAP_Lu24 Homo sapiens cDNA clone IMAGE:2340606 3' similar to gb:K00558
4634	17217	29670	1.92	8.0E-95	A1700998.1	EST_HUMAN	TUBULIN ALPHA-1 CHAIN (HUMAN);
7028	19562	32389	0.7	8.0E-95	11418376	NT	w609e04.x1 NCI CGAP_Lu24 Homo sapiens cDNA clone IMAGE:2340606 3' similar to gb:K00558
7280	19818	32677	1.44	8.0E-95	11426528	NT	TUBULIN ALPHA-1 CHAIN (HUMAN);
7280	19818	32678	1.44	8.0E-95	11426528	NT	Homo sapiens KIAA0193 gene product (KIAA0193), mRNA
8138	20679	33590	1.93	8.0E-95	AF032897.1	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, non-ATPase, 11 (PSMD11), mRNA
9287	21887	34832	1.88	8.0E-95	11420944	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, non-ATPase, 11 (PSMD11), mRNA
9287	21887	34833	1.88	8.0E-95	11420944	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, non-ATPase, 11 (PSMD11), mRNA
9762	22260	35243	3.42	8.0E-95	5174844	NT	Homo sapiens potassium channel subunit (HERG-3) mRNA, complete cds
9763	22291	35243	3.07	8.0E-95	AB037818.1	NT	Homo sapiens KIAA0255 gene product (KIAA0255), mRNA
10134	22628	35617	0.75	8.0E-95	9845523	NT	Homo sapiens KIAA0255 gene product (KIAA0255), mRNA
10592	23127	36141	1.76	8.0E-95	AF112152.1	NT	Homo sapiens proline dehydrogenase (proline oxidase) (PRODH) mRNA
11357	23811	36871	2.34	8.0E-95	10864024	NT	Homo sapiens mRNA for KIAA1395 protein, partial cds
12365	24538		25.75	8.0E-95	AA629056.1	EST_HUMAN	Homo sapiens early growth response 2 (Krox-20 (Drosophila) homolog) (EGR2), mRNA
297	12953	25441	6.43	7.0E-95	D87675.1	NT	Homo sapiens developmental arteries and neural crest EGF-like protein mRNA, complete cds
297	12953	25442	6.43	7.0E-95	D87675.1	NT	Homo sapiens HCF-binding transcription factor Zhangfei (ZF), mRNA
4456	17042	28486	5.64	7.0E-95	M95708.1	NT	zu84b01.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:744648 3' similar to contains L1.t1 L1 repetitive element ;
297	12953	25441	6.43	7.0E-95	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
297	12953	25442	6.43	7.0E-95	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
4456	17042	28486	5.64	7.0E-95	M95708.1	NT	Homo sapiens Ly-6-like protein (CD59) mRNA, complete cds

Table 4

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4505	17089		1.35	7.0E-95	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
9144	21679	34823	0.82	4.0E-95	BE439025.1	EST_HUMAN	HTM1-288F HTM1 Homo sapiens cDNA
11548	23966	37068	1.69	4.0E-95	AW950634.1	EST_HUMAN	EST362704 MAGC resequences, MAGC Homo sapiens cDNA
11548	23966	37068	1.69	4.0E-95	AW950634.1	EST_HUMAN	EST362704 MAGC resequences, MAGC Homo sapiens cDNA
224	12885	25370	6.53	3.0E-95	AV648361.1	EST_HUMAN	AV648361 GLC Homo sapiens cDNA clone GLCBIF01.3
5634	18263	30735	1.75	3.0E-95	BF528041.1	EST_HUMAN	602071146F1 NCI_CGAP_Brr64 Homo sapiens cDNA clone IMAGE:4214147.5
5854	24750	31200	0.72	3.0E-95	4503354	NT	Homo sapiens dedicator of cyto-kinesis 1 (DOCK1) mRNA
7404	19928	32762	1.38	3.0E-95	AW958121.1	EST_HUMAN	EST370191 MAGC resequences, MAGC Homo sapiens cDNA
7404	19928	32762	1.38	3.0E-95	AW958121.1	EST_HUMAN	EST370191 MAGC resequences, MAGC Homo sapiens cDNA
9277	21803	34753	1.71	3.0E-95	7662289	NT	Homo sapiens KIAA0763 gene product (KIAA0763), mRNA
9277	21803	34754	1.71	3.0E-95	7662289	NT	Homo sapiens KIAA0763 gene product (KIAA0763), mRNA
9662	22161	35134	0.87	3.0E-95	BF213446.1	EST_HUMAN	601845212F1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:4070451.5
10759	23283	36296	2.2	3.0E-95	R83190.1	EST_HUMAN	Y987g11.r1 Soares fetal liver spleen 1NLS Homo sapiens cDNA clone IMAGE:194468.5
973	13585	26099	2.57	2.0E-95	4504374	NT	Homo sapiens H factor 1 (complement) (HF1) mRNA
1686	14278	26811	1.55	2.0E-95	7662027	NT	Homo sapiens KIAA0255 gene product (KIAA0255), mRNA
1686	14278	26812	1.55	2.0E-95	7662027	NT	Homo sapiens KIAA0255 gene product (KIAA0255), mRNA
1984	14566	27127	3.25	2.0E-95	4507512	NT	Homo sapiens tissue inhibitor of metalloproteinase 3 (Sorsby fundus dystrophy, pseudoinflammatory) (TIMP3) mRNA
1987	14569	27131	1.57	2.0E-95	BE393873.1	EST_HUMAN	601312161F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3658882.5
2470	15037	27604	1.23	2.0E-95	5453665	NT	Homo sapiens G protein-coupled receptor 19 (GPR19) mRNA
2470	15037	27605	1.23	2.0E-95	5453665	NT	Homo sapiens G protein-coupled receptor 19 (GPR19) mRNA
2505	15069	27642	4.2	2.0E-95	AF240786.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
2554	15118	27688	1.05	2.0E-95	4758423	NT	Homo sapiens glycine cleavage system protein H (aminomethyl carrier) (GCSH) mRNA
2844	13584	26098	8.06	2.0E-95	4504374	NT	Homo sapiens H factor 1 (complement) (HF1) mRNA
3193	15805	28278	2.54	2.0E-95	AF015452.1	NT	Homo sapiens Usurpin-gamma mRNA, complete cds
3621	16224	28701	2.98	2.0E-95	7705900	NT	Homo sapiens unconventional myosin-15 (LOC51168), mRNA
3621	16224	28702	2.98	2.0E-95	7705900	NT	Homo sapiens unconventional myosin-15 (LOC51168), mRNA
3677	16278	28745	0.72	2.0E-95	AB037807.1	NT	Homo sapiens mRNA for KIAA1386 protein, partial cds
3813	16413	28877	0.64	2.0E-95	AI280264.1	EST_HUMAN	qm01.c02.x1 Soares_NhHMPu_S1 Homo sapiens cDNA clone IMAGE:1880546.3 similar to WP.T23G7.4
4452	17038	29481	1.42	2.0E-95	7657185	NT	CE03705 ; Homo sapiens hypothetical protein (HS322B1A), mRNA
5048	17621	30066	3.24	2.0E-95	AF105087.1	NT	Homo sapiens lipopolysaccharide-binding protein (LBP) mRNA, complete cds
5191	17756	30185	3.19	2.0E-95	7661979	NT	Homo sapiens KIAA0187 gene product (KIAA0187), mRNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5251	17814	30237	1.69	2.0E-95	AA447831.1	EST_HUMAN	zx11d07.r1 Soares_tetal_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:786157 5'
5251	17814	30238	1.69	2.0E-95	AA447831.1	EST_HUMAN	zx11d07.r1 Soares_tetal_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:786157 5'
5671	18298	30778	5.36	2.0E-95	7705764	NT	Homo sapiens CGI-48 protein (LOC51096), mRNA
5671	18298	30779	5.36	2.0E-95	7705764	NT	Homo sapiens CGI-48 protein (LOC51096), mRNA
5876	18498	31223	1.21	2.0E-95	11225808	NT	Homo sapiens angiotensin I converting enzyme (peptidyl-dipeptidase A) 2 (ACE2), mRNA
5876	18498	31224	1.21	2.0E-95	11225808	NT	Homo sapiens angiotensin I converting enzyme (peptidyl-dipeptidase A) 2 (ACE2), mRNA
6291	18898	31670	3.33	2.0E-95	M59724.1	NT	Human muscle-type phosphofructokinase (PFK-M) gene, exon 7
6577	19175	31974	1.08	2.0E-95	11427182	NT	Homo sapiens transcription factor 2, hepatic; LF-B3; variant hepatic nuclear factor (TCF2), mRNA
6577	19175	31975	1.08	2.0E-95	11427182	NT	Homo sapiens transcription factor 2, hepatic; LF-B3; variant hepatic nuclear factor (TCF2), mRNA
6885	19281	32084	2.42	2.0E-95	AF257737.1	NT	Homo sapiens ciliary dynein heavy chain 9 (DNAH9) mRNA, complete cds
6881	19595	32426	1.8	2.0E-95	11435773	NT	Homo sapiens huntingtin (Huntington disease) (HD), mRNA
9069	21606	34537	1.85	2.0E-95	11421795	NT	Homo sapiens ribophorin II (RPN2), mRNA
10283	22778	35769	0.49	2.0E-95	11434330	NT	Homo sapiens KIAA1065 protein (KIAA1065), mRNA
10602	23136	36150	2.21	2.0E-95	4757853	NT	Homo sapiens bone morphogenetic protein receptor, type IA (BMPRI1A) mRNA
11546	23894	37065	1.74	2.0E-95	7662289	NT	Homo sapiens KIAA0763 gene product (KIAA0763), mRNA
11546	23894	37068	1.74	2.0E-95	7662289	NT	Homo sapiens KIAA0763 gene product (KIAA0763), mRNA
12103	24365	30971	2.55	2.0E-95	AF240786.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
12220	24442		1.41	2.0E-95	11417860	NT	Homo sapiens hypothetical protein (HS322B1A), mRNA
12534	24646	30899	8.02	2.0E-95	11418184	NT	Homo sapiens adenylosuccinate lyase (ADSL), mRNA
5789	18424	31140	7.86	1.0E-95	AA284651.1	EST_HUMAN	z123h04.r1 Soares ovary tumor NbhOT Homo sapiens cDNA clone IMAGE:714007 5' similar to TR:G1067084 G1067084 F55H2.6 ;
5789	18424	31141	7.86	1.0E-95	AA284651.1	EST_HUMAN	z123h04.r1 Soares ovary tumor NbhOT Homo sapiens cDNA clone IMAGE:714007 5' similar to TR:G1067084 G1067084 F55H2.6 ;
7523	20043	32912	4.18	1.0E-95	BF370000.1	EST_HUMAN	RC8-FN0019-290600-011-G11 FN0019 Homo sapiens cDNA
7523	20043	32913	4.18	1.0E-95	BF370000.1	EST_HUMAN	RC8-FN0019-290600-011-G11 FN0019 Homo sapiens cDNA
8135	20676	33588	1.51	9.0E-96	BE97259.1	EST_HUMAN	601437232F1 NIH_MGC_79 Homo sapiens cDNA clone IMAGE:3922423 5'
467	15415	25592	1.19	8.0E-96	BE97607.1	EST_HUMAN	601497608F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3899761 5'
467	15415	25593	1.19	8.0E-96	BE97607.1	EST_HUMAN	601497608F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3899761 5'
5702	18328		2.71	8.0E-96	AW836047.1	EST_HUMAN	PM0LT0019-090300-002-d08 LT0019 Homo sapiens cDNA
3980	18578	28048	0.99	7.0E-96	AF231820.1	NT	Homo sapiens chromosome 21 unknown mRNA
3360	15988	28445	1.65	6.0E-96	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
3529	16134	28614	11.93	6.0E-96	M28873.1	NT	Human glyceraldehyde-3-phosphate dehydrogenase pseudogene 3 end

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5820	18444	31168	0.85	6.0E-98	11422842	NT	Homo sapiens sialyltransferase 6 (N-acetylglucosaminide alpha 2,3-sialyltransferase) (SIAT6), mRNA
11420	23871	36932	2.52	6.0E-96	7682289	NT	Homo sapiens KIAA0763 gene product (KIAA0763), mRNA
11420	23871	36933	2.52	6.0E-96	7682289	NT	Homo sapiens KIAA0763 gene product (KIAA0763), mRNA
11461	23911	36978	1.96	6.0E-96	8923939	NT	Homo sapiens myosin, heavy polypeptide 2, skeletal muscle, adult (MYH2), mRNA
342	12964	25478	2.95	5.0E-96	AB032998.1	NT	Homo sapiens mRNA for KIAA1172 protein, partial cds
875	13489	26005	3.61	5.0E-96	AB032998.1	NT	Homo sapiens mRNA for KIAA1172 protein, partial cds
875	13489	26006	3.61	5.0E-96	AB032998.1	NT	Homo sapiens mRNA for KIAA1172 protein, partial cds
2650	15209		0.91	5.0E-96	11416767	NT	Homo sapiens phosphodiesterase 6A, cGMP-specific, rod, alpha (PDE6A), mRNA
3061	15677	28151	0.59	5.0E-96	6912735	NT	Homo sapiens transient receptor potential channel 5 (TRPC5), mRNA
5030	17804		1.6	5.0E-96	X60812.1	NT	H. sapiens DNA for monoamine oxidase type A (7) (partial)
6758	19351	32160	1.1	5.0E-96	AF149773.1	NT	Homo sapiens NOD1 protein (NOD1) gene, exons 1, 2, and 3
6878	19612	32445	4.05	5.0E-96	11424399	NT	Homo sapiens A kinase (PRKA) anchor protein 1 (AKAP1), mRNA
6878	19612	32446	4.05	5.0E-96	11424399	NT	Homo sapiens A kinase (PRKA) anchor protein 1 (AKAP1), mRNA
7090	19661	32501	0.76	5.0E-96	AB023177.1	NT	Homo sapiens mRNA for KIAA0960 protein, partial cds
7524	20044	32914	1.7	5.0E-96	AB024334.1	NT	Homo sapiens mRNA for 14-3-3gamma, complete cds
8050	20592	33499	1.92	5.0E-96	M68347.1	NT	Human type IV collagenase (CLG4B) gene, exon 5
8050	20592	33500	1.62	5.0E-96	M68347.1	NT	Human type IV collagenase (CLG4B) gene, exon 5
11618	24060	37124	1.66	5.0E-96	7661973	NT	Homo sapiens KIAA0175 gene product (KIAA0175), mRNA
4269	16855		8.01	3.0E-96	H86656.1	EST_HUMAN	y87h12.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:212327 5'
440	13073		3.68	2.0E-96	4503098	NT	Homo sapiens chondroitin sulfate proteoglycan 4 (melanoma-associated) (CSPG4), mRNA
777	13396	25897	1.52	2.0E-96	AL163248.2	NT	Homo sapiens chromosome 21 segment HS21C048
4871	17447	28898	1.56	2.0E-96	BE148074.1	EST_HUMAN	RC3-H1T0230-040500-110-g02 HT0230 Homo sapiens cDNA
8911	21449		5.45	2.0E-96	AV689461.1	EST_HUMAN	AV689461 OKC Homo sapiens cDNA clone GKCFCMD07 5'
11795	24176		1.71	2.0E-96	AW249440.1	EST_HUMAN	2819351.5prime NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2819351 5'
699	13321	25808	2.62	1.0E-96	Y18890.1	NT	Human endogenous retrovirus type K (HERV-K), gag, pol and env genes
1817	14407	26951	3.32	1.0E-96	AW955054.1	EST_HUMAN	EST367124 MAGC resequences, MAGC Homo sapiens cDNA
1817	14407	26952	3.32	1.0E-96	AW955054.1	EST_HUMAN	EST367124 MAGC resequences, MAGC Homo sapiens cDNA
2272	14846	27421	1.3	1.0E-96	M75967.1	NT	Human hepatocyte growth factor gene, exon 1
2272	14846	27422	1.3	1.0E-96	M75967.1	NT	Human hepatocyte growth factor gene, exon 1
2306	15398	27455	1.1	1.0E-96	U51472.2	NT	Felis catus superfast myosin heavy chain (sMyHC) mRNA, complete cds
7045	18065	30455	1.06	1.0E-96	6912735	NT	Homo sapiens transient receptor potential channel 5 (TRPC5), mRNA
8134	20695	33608	0.9	1.0E-96	7661803	NT	Homo sapiens HSPC144 protein (HSPC144), mRNA
8154	20695	33609	0.9	1.0E-96	7661803	NT	Homo sapiens HSPC144 protein (HSPC144), mRNA

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8650	21189	34107	22.03	1.0E-98	11418429	NT	Homo sapiens similar to ectonucleotide pyrophosphatase/phosphodiesterase 3 (H. sapiens) (LOC63214), mRNA
8784	21323	34247	2.21	1.0E-98	AF274863.1	NT	Homo sapiens secretory pathway component Sec31B-1 mRNA, alternatively spliced, complete cds
10064	22559	35553	0.87	1.0E-98	AB033116.1	NT	Homo sapiens mRNA for KIAA1290 protein, partial cds
10064	22559	35554	0.87	1.0E-98	AB033116.1	NT	Homo sapiens mRNA for KIAA1290 protein, partial cds
11781	18023	30404	2.56	1.0E-98	4826863	NT	Homo sapiens neuronal cell adhesion molecule (NRCAM) mRNA
11781	18023	30405	2.56	1.0E-98	4826863	NT	Homo sapiens neuronal cell adhesion molecule (NRCAM) mRNA
3370	15978	28455	0.62	6.0E-97	BF245240.1	EST_HUMAN	601663712F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:4081202 5'
7558	20076		2.76	6.0E-97	BE141849.1	EST_HUMAN	IL5-HT0117-011089-004-D07 HT0117 Homo sapiens cDNA
8884	21403	34327	0.74	6.0E-97	BE888012.1	EST_HUMAN	601440317F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3925133 5'
8864	21403	34328	0.74	6.0E-97	BE888012.1	EST_HUMAN	601440317F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3925133 5'
10486	22980	35987	0.52	6.0E-97	AA320332.1	EST_HUMAN	EST22672 Adipose tissue, white II Homo sapiens cDNA 5' end
10486	22980	35988	0.52	6.0E-97	AA320332.1	EST_HUMAN	EST22672 Adipose tissue, white II Homo sapiens cDNA 5' end
11284	23737	36793	1.8	6.0E-97	X15804.1	NT	Human mRNA for alpha-actinin
7957	20499	33409	2.45	5.0E-97	AL043314.2	EST_HUMAN	DKFZp434N0323.1 434 (synonym: hlaa3) Homo sapiens cDNA clone DKFZp434N0323 5'
8085	20626	33540	12.64	5.0E-97	AA418026.1	EST_HUMAN	z07e12.s1 Soares_NIH-HMPu_S1 Homo sapiens cDNA clone IMAGE:767758 3' similar to TR:G1304125
9593	22093	35057	2.67	5.0E-97	BF154912.1	EST_HUMAN	G1304125 PMS4 MRNA ;
11421	23872	36934	1.98	5.0E-97	BE148597.1	EST_HUMAN	RC0-BT0812-250800-032-a09 BT0812 Homo sapiens cDNA
11421	23872	36935	1.99	5.0E-97	BE148597.1	EST_HUMAN	MR0-HT0241-150500-010-502 HT0241 Homo sapiens cDNA
975	13587	25102	6.69	4.0E-97	BE004436.1	EST_HUMAN	MR0-HT0241-150500-010-502 HT0241 Homo sapiens cDNA
1953	14537	27093	0.97	4.0E-97	3453572	NT	CM0-BN0108-170300-283-a08 BN0108 Homo sapiens cDNA
5754	18380	31091	17.27	4.0E-97	4557326	NT	Homo sapiens brefeldin A-inhibited guanine nucleotide-exchange protein 2 (BIG2), mRNA
6912	19571	32398	6.05	4.0E-97	Y11339.2	NT	Homo sapiens apolipoprotein H (beta-2-glycoprotein 1) (APOH) mRNA
6912	19571	32400	6.05	4.0E-97	Y11339.2	NT	Homo sapiens mRNA for GalNAc alpha-2, 6-sialyltransferase 1, long form
7088	19659	32498	1.01	4.0E-97	7710125	NT	Homo sapiens mRNA for GalNAc alpha-2, 6-sialyltransferase 1, long form
7128	19488	32286	1.01	4.0E-97	11422155	NT	Homo sapiens ligase III, DNA, ATP-dependent (LIC3), transcript variant alpha, mRNA
7778	20288	33186	0.74	4.0E-97	10947053	NT	Homo sapiens cystic fibrosis transmembrane conductance regulator, ATP-binding cassette (sub-family C, member 7) (CFTR), mRNA
7778	20288	33187	0.74	4.0E-97	10947053	NT	Homo sapiens ankyrin 2, neuronal (ANK2), transcript variant 2, mRNA
8078	20620	33533	0.84	4.0E-97	4557708	NT	Homo sapiens ankyrin 2, neuronal (ANK2), transcript variant 2, mRNA
8289	20840	33761	1.57	4.0E-97	11421783	NT	Homo sapiens laminin, alpha 2 (merosin, congenital muscular dystrophy) (LAMA2) mRNA
8555	21094	34014	0.73	4.0E-97	11423233	NT	Homo sapiens v-ero avian sarcoma (Schmidt-Ruppin A-2) viral oncogene homolog (SRC), mRNA
							Homo sapiens cytochrome P450, subfamily IVB, polypeptide 1 (CYP4B1), mRNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9172	21749	34692	1.23	4.0E-97	AB011166.1	NT	Homo sapiens mRNA for KIAA0594 protein, partial cds
9172	21749	34693	1.23	4.0E-97	AB011166.1	NT	Homo sapiens mRNA for KIAA0594 protein, partial cds
10333	22827	35822	0.75	4.0E-97	11431060	NT	Homo sapiens N-myc (and STAT) interactor (NMI), mRNA
11042	23556	36591	1.85	4.0E-97	11863122	NT	Homo sapiens AXL receptor tyrosine kinase (AXL), transcript variant 1, mRNA
11042	23556	36592	1.85	4.0E-97	11863122	NT	Homo sapiens AXL receptor tyrosine kinase (AXL), transcript variant 1, mRNA
11977	24288		4.75	4.0E-97	11418318	NT	Homo sapiens G-2 and S-phase expressed 1 (GTSE1), mRNA
264	12922	25408	2.37	3.0E-97	AB032998.1	NT	Homo sapiens mRNA for KIAA1172 protein, partial cds
907	13521	26039	8.51	3.0E-97	4502166	NT	Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA
907	13521	26040	8.51	3.0E-97	4502166	NT	Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA
1490	15443	26623	2.15	3.0E-97	4758813	NT	Homo sapiens N-myc (and STAT) interactor (NMI), mRNA
2483	15400	27618	1.36	3.0E-97	U36255.1	NT	Human beta-prime-adaptin (BAM22) gene, exon 7
3205	15817	28293	37.82	3.0E-97	K02212.1	NT	Human alpha-1-antitrypsin gene (S variant), complete cds
3299	15910	28389	1.48	3.0E-97	5174478	NT	Homo sapiens pericentrin (PCNT) mRNA
3893	16492	28952	1.04	3.0E-97	AF136523.1	NT	Homo sapiens bile salt export pump (BSEP) mRNA, complete cds
4894	17469	28925	28.9	1.0E-97	4503470	NT	Homo sapiens eukaryotic translation elongation factor 1 alpha 1 (EEF1A1) mRNA
6558	19156	31952	2.38	1.0E-97	BE566486.1	EST_HUMAN	601339520F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3681821 5'
9365	20304	33206	0.6	1.0E-97	AW379976.1	EST_HUMAN	RC0-HT0258-211199-011-g05 HT0258 Homo sapiens cDNA
9365	20304	33207	0.6	1.0E-97	AW379976.1	EST_HUMAN	RC0-HT0258-211199-011-g05 HT0258 Homo sapiens cDNA
9679	22178	35153	1.21	1.0E-97	R10887.1	EST_HUMAN	yf38c08.s1 Soares fetal liver spleen TNF- α Homo sapiens cDNA clone IMAGE:129134 3'
10584	23119	36134	4.07	1.0E-97	11427757	NT	Homo sapiens KIAA0049 gene product (KIAA0049), mRNA
10584	23119	36135	4.07	1.0E-97	11427757	NT	Homo sapiens KIAA0049 gene product (KIAA0049), mRNA
11189	23694	36743	3.53	1.0E-97	AA553761.1	EST_HUMAN	h29g02.s1 NCI_CGAP_Co11 Homo sapiens cDNA clone IMAGE:1014962 3'
11343	23041	36050	18.96	1.0E-97	11426272	NT	Homo sapiens ribosomal protein S15 (RPS15), mRNA
11343	23041	36051	18.96	1.0E-97	11426272	NT	Homo sapiens ribosomal protein S15 (RPS15), mRNA
934	13547	26064	5.55	9.0E-98	BE090973.1	EST_HUMAN	PM4-BT0724-010400-008-e12 BT0724 Homo sapiens cDNA
1319	13913	26434	1.41	9.0E-98	8393092	NT	Homo sapiens cat eye syndrome critical region gene 1 (CECR1), mRNA
6445	19047		0.67	9.0E-98	AJ250713.1	NT	Homo sapiens CLDN12 gene for claudin-12
7865	20407	33314	7.35	9.0E-98	4758119	NT	Homo sapiens death-associated protein (DAP), mRNA
7865	20407	33315	7.35	9.0E-98	4758119	NT	Homo sapiens death-associated protein (DAP), mRNA
9044	21581	34510	2	9.0E-98	X06989.1	NT	Human mRNA for amyloid A4(751) protein
9151	21686	34829	1.94	9.0E-98	11321580	NT	Homo sapiens succinate-CoA ligase, GDP-forming, alpha subunit (SUCCLG1), mRNA
9216	21733	34876	1.46	9.0E-98	AB037786.1	NT	Homo sapiens mRNA for KIAA1365 protein, partial cds

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9262	21788		1.25	9.0E-98	AF057726.1	NT	Homo sapiens 17-beta-hydroxysteroid dehydrogenase IV (HSD17B4) gene, exon 8
9289	21889	34835	1.15	9.0E-98	4507070	NT	Homo sapiens SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 3 (SMARCA3) mRNA
9289	21889	34836	1.15	9.0E-98	4507070	NT	Homo sapiens SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 3 (SMARCA3) mRNA
10161	22858	35651	0.54	9.0E-98	AF141325.2	NT	Homo sapiens inositol polyphosphate 1-phosphatase (INPP1) gene, complete cds
10268	22763	35750	0.5	9.0E-98	11431644	NT	Homo sapiens protease-activated receptor 3 (PAR3), mRNA
10883	23404	36422	2.37	9.0E-98	AB023222.1	NT	Homo sapiens mRNA for KIAA1005 protein, partial cds
10883	23404	36423	2.37	9.0E-98	AB023222.1	NT	Homo sapiens mRNA for KIAA1005 protein, partial cds
11984	13547	26064	4.29	9.0E-98	BE090973.1	EST_HUMAN	PM4-BT0724-010400-008-a12 BT0724 Homo sapiens cDNA
27	12706		0.82	8.0E-98	AJ251158.1	NT	Homo sapiens partial MCB gene for MHC class I chain-related protein B, exons 2-3 and joined CDS
1607	14199	28732	1.04	8.0E-98	5031810	NT	Homo sapiens IL2-inducible T-cell kinase (ITK), mRNA
1607	14199	26733	1.04	8.0E-98	5031810	NT	Homo sapiens IL2-inducible T-cell kinase (ITK), mRNA
1764	14354	26900	1.64	8.0E-98	AB017007.1	NT	Homo sapiens PMS2L16 mRNA, partial cds
1764	14354	26901	1.64	8.0E-98	AB017007.1	NT	Homo sapiens PMS2L16 mRNA, partial cds
3963	18481	28925	7.16	8.0E-98	J04466.1	NT	Human mitochondrial creatine kinase (CKMT) gene, complete cds
5278	17938		1.43	8.0E-98	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
6233	18842	31614	1.18	5.0E-98	BE885873.1	EST_HUMAN	601507503F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3909097 5'
12398	24558	30908	1.68	4.0E-98	BE348727.1	EST_HUMAN	h68602.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3151899 3'
2222	14797	27370	1.15	3.0E-98	AJ403124.1	EST_HUMAN	AJ403124 3.4 (downregulated in larynx carcinoma) Homo sapiens cDNA clone 18
2639	15198	27772	1.87	3.0E-98	AB014607.1	NT	Homo sapiens mRNA for KIAA0707 protein, partial cds
2777	15330		1.87	3.0E-98	AA077498.1	EST_HUMAN	7B18H01 Chromosome 7 Fetal Brain cDNA Library Homo sapiens cDNA clone 7B18H01
7028	19560	32386	1.66	3.0E-98	11419210	NT	Homo sapiens activator of S phase kinase (ASK), mRNA
7028	19560	32387	1.88	3.0E-98	11419210	NT	Homo sapiens activator of S phase kinase (ASK), mRNA
8888	21225	34145	3.05	3.0E-98	H46698.1	EST_HUMAN	yot7g09.r1 Soares adult brain N2b5H955Y Homo sapiens cDNA clone IMAGE:178240 5'
9221	21737	34679	0.77	3.0E-98	8922098	NT	Homo sapiens uncharacterized bone marrow protein BM039 (BM039), mRNA
9798	22296	35279	1.8	3.0E-98	AJ403124.1	EST_HUMAN	AJ403124 3.4 (downregulated in larynx carcinoma) Homo sapiens cDNA clone 18
9798	22296	35280	1.8	3.0E-98	AJ403124.1	EST_HUMAN	AJ403124 3.4 (downregulated in larynx carcinoma) Homo sapiens cDNA clone 18
10369	22863	35858	0.86	3.0E-98	BE900454.1	EST_HUMAN	601673686F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3956517 5'
10831	23352	36367	3.79	3.0E-98	U59309.1	NT	Human fumarate precursor (FH) mRNA, nuclear gene encoding mitochondrial protein, complete cds
12588	24885		5.13	3.0E-98	11418177	NT	Homo sapiens Ran GTPase activating protein 1 (RANGAP1), mRNA
765	13384	-25863	0.81	2.0E-98	BE261694.1	EST_HUMAN	601149486F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3502245 5'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2124	14702	27272	3.36	2.0E-08	BE284281.1	EST_HUMAN	601172658F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3528134 5'
2278	14853	27431	1.37	2.0E-08	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
4384	18971	29419	0.74	2.0E-08	AF032887.1	NT	Homo sapiens potassium channel subunit (HERG-3) mRNA, complete cds
4432	17018	29458	4.65	2.0E-08	4758331	NT	Homo sapiens fatty-acid-Coenzyme A ligase, long-chain 4 (FACL4) mRNA
4853	17528	29868	0.98	2.0E-08	AF218902.1	NT	Homo sapiens attractin precursor (ATRN) gene, exon 16
4853	17528	29869	0.96	2.0E-08	AF218902.1	NT	Homo sapiens attractin precursor (ATRN) gene, exon 16
5578	18210	30860	4.63	2.0E-08	7706512	NT	Homo sapiens PDZ domain-containing guanine nucleotide exchange factor 1 (LOC51735), mRNA
8761	18354	32163	1.03	2.0E-08	4505798	NT	Homo sapiens phosphatidylinositol 3-kinase, class 2, alpha polypeptide (PIK3C2A) mRNA
7819	20132	33008	1.13	2.0E-08	11431271	NT	Homo sapiens hypothetical protein FLJ10488 (FLJ10488), mRNA
7819	20132	33009	1.13	2.0E-08	11431271	NT	Homo sapiens hypothetical protein FLJ10488 (FLJ10488), mRNA
8544	21083	34004	3.84	2.0E-08	11428813	NT	Homo sapiens SH3-domain GRB2-like 2 (SH3GL2), mRNA
8544	21083	34005	3.84	2.0E-08	11428813	NT	Homo sapiens SH3-domain GRB2-like 2 (SH3GL2), mRNA
8625	21164	34078	0.62	2.0E-08	L76666.1	NT	Homo sapiens NKA14b mRNA, complete cds
8625	21164	34079	0.62	2.0E-08	L76666.1	NT	Homo sapiens NKA14b mRNA, complete cds
9456	21982	34834	3.9	2.0E-08	X12664.1	NT	H. sapiens arginase gene exon 3 (EC 3.5.3.1)
10312	22808		1.31	2.0E-08	7705868	NT	Homo sapiens AIM-1 protein (LOC51151), mRNA
11078	23580	36828	1.6	2.0E-08	U22028.1	NT	Human cytochrome P450 (CYP2A13) gene, complete cds
11999	24305	30989	1.62	2.0E-08	11435947	NT	Homo sapiens chromosome 12 open reading frame 3 (C12ORF3), mRNA
430	13063	25558	57.29	1.0E-08	AI692007.1	EST_HUMAN	hw38b04.x1 NCL_CGAP_U11 Homo sapiens cDNA clone IMAGE:2261743 3' similar to SW:RL2B_HUMAN
480	13113	25903	2.18	1.0E-08	AW998611.1	EST_HUMAN	PMO-BN0065-10300-001-c06 BN0065 Homo sapiens cDNA
1832	14420	26970	13.46	1.0E-08	N49818.1	EST_HUMAN	y23705.r1 Soares fetal liver spleen 1N1LS Homo sapiens cDNA clone IMAGE:243565 5' similar to PIR:S54204 S54204 ribosomal protein L29 - human ;
5520	18152	30565	3.14	1.0E-08	AA195854.1	EST_HUMAN	z088c09.r1 Stralagene muscle 937209 Homo sapiens cDNA clone IMAGE:628240 5' similar to TR:G805562 G805562 NEBULIN ;
5758	18384	31097	1.12	1.0E-08	BE390627.1	EST_HUMAN	601284986F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3606692 5'
5758	18384	31098	1.12	1.0E-08	BE390627.1	EST_HUMAN	601284986F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3606692 5'
8928	21466	34383	8.27	1.0E-08	AF141348.1	NT	Homo sapiens beta-tubulin mRNA, complete cds
8928	21466	34384	8.27	1.0E-08	AF141348.1	NT	Homo sapiens beta-tubulin mRNA, complete cds
5884	18804	31338	0.93	9.0E-09	AI905004.1	EST_HUMAN	QV-B7073-191298-012 B7073 Homo sapiens cDNA
5884	18804	31339	0.93	9.0E-09	AI905004.1	EST_HUMAN	QV-B7073-191298-012 B7073 Homo sapiens cDNA
6191	18801	31571	4.33	9.0E-09	AW998635.1	EST_HUMAN	EST380711 MAGe resequences, MAGJ Homo sapiens cDNA
11001	23515	36549	3.39	9.0E-09	AI478828.1	EST_HUMAN	hm68h07.x1 NCL_CGAP_Brn25 Homo sapiens cDNA clone IMAGE:2163421 3' similar to SW:RID_HUMAN P55957 BH3 INTERACTING DOMAIN DEATH AGONIST ;

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11001	23515	36550	3.39	9.0E-99	AI479829.1	EST_HUMAN	trn90h07.x1 NCL_CGAP_Brn25 Homo sapiens cDNA clone IMAGE:2163421 3' similar to SW:BIID_HUMAN P55957 BH3 INTERACTING DOMAIN DEATH AGONIST ;
11292	23744	36801	1.97	9.0E-99	AA134604.1	EST_HUMAN	zn90d02.r1 Stragene lung carcinoma 937218 Homo sapiens cDNA clone IMAGE:585443 5' similar to TR:G662994 G662994 GPI-ANCHORED PROTEIN P137. ;
11627	24069	37133	2.11	9.0E-99	AJ271736.1	NT	Homo sapiens Xq pseudautosomal region: segment 2/2
8661	21200	34118	1.59	8.0E-99	9635487	NT	Human endogenous retrovirus, complete genome
5989	18819	31355	10.3	7.0E-99	AF035908.1	NT	Homo sapiens oscillin (hLn) gene, exon 5
11477	23927	36998	2.52	7.0E-99	AF001886.1	NT	Homo sapiens NK-receptor (KIR-G2) gene, linker region exon
497	13129	28618	0.57	6.0E-99	U10991.1	NT	Human G2 protein mRNA, partial cds
4859	17437	29887	1.3	6.0E-99	4502860	NT	Homo sapiens CD34 antigen (CD34) mRNA
5382	17941	30355	1.01	6.0E-99	8923244	NT	Homo sapiens hypothetical protein FLJ20272 (FLJ20272), mRNA
8711	18305	32109	1	6.0E-99	7706138	NT	Homo sapiens GAP-like protein (LOC51308), mRNA
6780	18371	32186	1.39	6.0E-99	L43610.1	NT	Homo sapiens polycystic kidney disease (PKD1) gene, exons 27-30
6780	18371	32186	1.39	6.0E-99	L43610.1	NT	Homo sapiens polycystic kidney disease (PKD1) gene, exons 27-30
8048	20590	33497	1.11	6.0E-99	X99101.1	NT	H. sapiens mRNA for estrogen receptor
8700	21239	34182	1.88	6.0E-99	AB036429.1	NT	Homo sapiens NDST4 mRNA for N-deacetylase/N-sulfotransferase 4, complete cds
8797	21336	34261	4.03	6.0E-99	AF080255.1	NT	Homo sapiens lodestar protein mRNA, complete cds
8797	21336	34282	4.03	6.0E-99	AF080255.1	NT	Homo sapiens lodestar protein mRNA, complete cds
8854	21393	34315	0.62	6.0E-99	11431994	NT	Homo sapiens inositol 1,4,5-triphosphate receptor, type 1 (ITPR1), mRNA
8854	21393	34316	0.62	6.0E-99	11431994	NT	Homo sapiens inositol 1,4,5-triphosphate receptor, type 1 (ITPR1), mRNA
10598	23132	36146	4.18	6.0E-99	11526299	NT	Homo sapiens BH3 interacting domain death agonist (BID), mRNA
953	13565	28077	9.63	5.0E-99	U35464.1	NT	Human protein C inhibitor (PCI-B) mRNA, complete cds
953	13565	28078	9.63	5.0E-99	U35464.1	NT	Human protein C inhibitor (PCI-B) mRNA, complete cds
2007	14589	27149	1.33	5.0E-99	Y11365.1	NT	Human IMPA gene, exon 8
4663	17245	29698	1.44	5.0E-99	AF009680.1	NT	Homo sapiens T cell receptor beta locus, TCRBV7S3A2 to TCRBV12S2 region
12009	24311		2.1	5.0E-99	BE890177.1	EST_HUMAN	601513157F1 NIH_MGC 71 Homo sapiens cDNA clone IMAGE:3914391 5'
8263	20804		5.49	3.0E-99	M95596.1	NT	Human E2A/JHL fusion protein (E2A/JHL) mRNA, complete cds
1282	13678		15.39	2.0E-99	AW274792.1	EST_HUMAN	XP009008.X1 NCL_CGAP_HN9 Homo sapiens cDNA clone IMAGE:2739874 3' similar to gb:M31212 MYOSIN LIGHT CHAIN ALKALI, NON-MUSCLE ISOFORM (HUMAN);
3297	15908	28388	1.27	2.0E-99	M30938.1	NT	Human Ku (p70/p80) subunit mRNA, complete cds
4641	17223	29677	1.67	2.0E-99	AF065703.1	NT	Homo sapiens short chain L-3-hydroxyacyl-CoA dehydrogenase precursor (HADHSC) gene, nuclear gene encoding mitochondrial protein, complete cds
7687	20179	33068	1.28	2.0E-99	AF257737.1	NT	Homo sapiens ciliary dynein heavy chain 9 (DNAH9) mRNA, complete cds

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8641	21180	34100	9.63	2.0E-99	W23507.1	EST_HUMAN	zb46d06 r1 Soares_fetal_lung_NbHL19W Homo sapiens cDNA clone IMAGE:306635 5' similar to
9078	21615	34550	0.63	2.0E-99	R78254.1	EST_HUMAN	gb:M15182 BETA-GLUCURONIDASE PRECURSOR (HUMAN);
10984	23488	36528	3.8	2.0E-99	AF247457.2	NT	y81b09 r1 Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:145625 5'
11617	24059	37123	1.61	2.0E-99	10863960	NT	Homo sapiens myosin X (MYO10) mRNA, complete cds
337	12989	25478	1.46	1.0E-99	AF114487.1	NT	Homo sapiens potassium channel, subfamily K, member 10 (KCNK10), mRNA
402	13048	25537	1.21	1.0E-99	11528150	NT	Homo sapiens interseitin long isoform (ITSN) mRNA, complete cds
1466	14058	26592	2.52	1.0E-99	M30938.1	NT	Homo sapiens GA-binding protein transcription factor, alpha subunit (60kD) (GABPA), mRNA
1603	14195	26728	2.14	1.0E-99	AF192523.1	NT	Human Ku (p70/p80) subunit mRNA, complete cds
1603	14195	26727	2.14	1.0E-99	AF192523.1	NT	Homo sapiens truncated Niemann-Pick C3 protein (NPC3) mRNA, complete cds
1971	14555	27111	0.91	1.0E-99	4503730	NT	Homo sapiens truncated Niemann-Pick C3 protein (NPC3) mRNA, complete cds
1971	14555	27112	0.91	1.0E-99	4503730	NT	Homo sapiens FK506-binding protein 6 (38kD) (FKBP6) mRNA, and translated products
3121	15735	28204	0.9	1.0E-99	J03171.1	NT	Homo sapiens FK506-binding protein 6 (38kD) (FKBP6) mRNA, and translated products
4469	17055	29499	2.98	1.0E-99	AF098018.1	NT	Human interferon-alpha receptor (HuIFN-alpha-Rec) mRNA, complete cds
4469	17055	29500	2.98	1.0E-99	AF098018.1	NT	Homo sapiens fatty acid amide hydrolase (FAAH) gene, exon 14
6896	19630	32467	2.18	1.0E-99	11421007	NT	Homo sapiens fatty acid amide hydrolase (FAAH) gene, exon 14
6896	19630	32468	2.18	1.0E-99	11421007	NT	Homo sapiens glycine receptor, alpha 2 (GLRA2), mRNA
7193	24778	32574	0.8	1.0E-99	X98022.1	NT	Homo sapiens glycine receptor, alpha 2 (GLRA2), mRNA
9127	21662		1.04	1.0E-99	11419721	NT	H. sapiens EG-AP gene exon 2
9439	21965	34914	1.81	1.0E-99	AW340174.1	EST_HUMAN	Homo sapiens ALEX1 protein (LOC51309), mRNA
11084	23578	36614	1.82	1.0E-99	5901979	NT	hd02h02.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2808371 3' similar to TR:002711
11255	23785	36841	2.94	1.0E-99	AB023222.1	NT	002711 PRO-POL-DUTPASE POLYPROTEIN ;
11557	24005	37077	1.8	1.0E-99	AF223391.1	NT	Homo sapiens heat shock transcription factor 2 binding protein (HSF2BP), mRNA
11637	24076	37136	1.57	1.0E-99	AF223391.1	NT	Homo sapiens mRNA for KIAA1005 protein, partial cds
11764	24155		9.05	1.0E-100	AF240786.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
1	12682	25138	1.19	1.0E-100	AL163247.2	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
2	12682	25138	1.73	1.0E-100	AL163247.2	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
72	12750	25227	1.35	1.0E-100	11418230	NT	Homo sapiens chromosome 21 segment HS21C047
72	12750	25228	1.35	1.0E-100	11418230	NT	Homo sapiens chromosome 21 segment HS21C047
90	12766	25250	0.79	1.0E-100	AW275237.1	EST_HUMAN	Homo sapiens Testis-specific XK-related protein on Y (XKRY), mRNA
							Homo sapiens Testis-specific XK-related protein on Y (XKRY), mRNA
							xv78b11.x1 NC1_CGAP_Brn53 Homo sapiens cDNA clone IMAGE:2824605 3'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
180	12842	25326	1.18	1.0E-100	AL163206.2	NT	Homo sapiens chromosome 21 segment HS21C006
339	12991	25478	1.76	1.0E-100	AL163249.2	NT	Homo sapiens chromosome 21 segment HS21C049
365	13014	25487	2.08	1.0E-100	T05087.1	EST_HUMAN	EST02975 Fetal brain, Striatum (cat936208) Homo sapiens cDNA clone HFBCR32
462	13096		1.84	1.0E-100	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
515	13148		8.1	1.0E-100	X89831.1	NT	G.gorilla DNA for ZNF80 gene homolog
535	13166	25647	1.78	1.0E-100	BE180608.1	EST_HUMAN	RC3-H1T0625-040500-022-b08 HT0625 Homo sapiens cDNA
1057	13662	26172	3.18	1.0E-100	7681685	NT	Homo sapiens DKFZP586M0122 protein (DKFZP586M0122), mRNA
1057	13662	26173	3.18	1.0E-100	7681685	NT	Homo sapiens DKFZP586M0122 protein (DKFZP586M0122), mRNA
1483	14076	26614	0.93	1.0E-100	BF530735.1	EST_HUMAN	602072064F1 NCL CGAP_Bim87 Homo sapiens cDNA clone IMAGE:4215039 5'
1594	14187		2.49	1.0E-100	AW207555.1	EST_HUMAN	UL-H-B11-afk-c-07-0-UJ.s1 NCL CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2722184 3'
1598	14190	26721	1.32	1.0E-100	AI200857.1	EST_HUMAN	qf6208.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1754633 3' similar to SW:CYT_COTJA
2284	14558		2.78	1.0E-100	D83349.1	NT	P81081 CYSTATIN 1
2482	15048	27617	0.87	1.0E-100	X92488.1	NT	Rat mRNA for short type PB-cadherin, complete cds
2731	15286	27653	2.8	1.0E-100	D11078.1	NT	Homo sapiens KIAA0957 protein (KIAA0957), mRNA
3053	15669		3.92	1.0E-100		NT	Homo sapiens RGH2 gene, retrovirus-like element
4289	16875	29324	1.83	1.0E-100	AF057354.1	NT	Homo sapiens myotubularin-related protein 1a mRNA, partial cds
4320	16906	29348	2.66	1.0E-100	4503792	NT	Homo sapiens follicle stimulating hormone receptor (FSHR) mRNA
5253	17616	30239	3.16	1.0E-100	5032104	NT	Homo sapiens small optic lobes (Drosophila) homolog (SOLH) mRNA
5253	17616	30240	3.16	1.0E-100	5032104	NT	Homo sapiens small optic lobes (Drosophila) homolog (SOLH) mRNA
5493	18127	30535	1.55	1.0E-100	BF244218.1	EST_HUMAN	601883164F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:4080989 5'
5699	18325	30828	0.87	1.0E-100	AW075983.1	EST_HUMAN	xa8201.x1 NCL CGAP_CML1 Homo sapiens cDNA clone IMAGE:2573305 3' similar to gb:X12433
5699	18501	31227	1.93	1.0E-100	AU118182.1	EST_HUMAN	PROTEIN PHPS1-2 (HUMAN);
5820	18542	31268	1.36	1.0E-100	AF135116.1	NT	AU118182 HEMBA1 Homo sapiens cDNA clone HEMBA1003046 5'
6003	18623	31358	10.01	1.0E-100	X14690.1	NT	Homo sapiens NF-E2-related factor 3 gene, complete cds
6311	18918	31692	1.06	1.0E-100	4557568	NT	Human mRNA for plasma inter-alpha-trypsin inhibitor heavy chain H(3)
6311	18918	31693	1.06	1.0E-100	4557568	NT	Homo sapiens ER to nucleus signalling 1 (ERN1) mRNA
6568	19164		1.29	1.0E-100	5728887	NT	Homo sapiens ER to nucleus signalling 1 (ERN1) mRNA
6623	19220	32025	5.02	1.0E-100	AU140214.1	EST_HUMAN	Homo sapiens hct domain and RLD 2 (HERC2), mRNA
6787	19378	32183	1.46	1.0E-100	R10887.1	EST_HUMAN	AU140214 PLAGE2 Homo sapiens cDNA clone PLACE2000137 5'
6868	19600	32431	2.42	1.0E-100	7382479	NT	y3808.61 Soares fetal liver spleen INFLS Homo sapiens cDNA clone IMAGE:128134 3'
							Homo sapiens Rho GTPase activating protein 6 (ARHGAP6), transcript variant 4, mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6929	19588	32417	1.2	1.0E-100	AA498841.1	EST_HUMAN	ae33b06.r1 Gessler Wilms tumor Homo sapiens cDNA clone IMAGE:897587 5' similar to TR:G487418
6929	19588	32418	1.2	1.0E-100	AA498841.1	EST_HUMAN	G487418 ACTIN FILAMENT-ASSOCIATED PROTEIN ;
6966	19543	32368	1.25	1.0E-100	BF376478.1	EST_HUMAN	ae33b06.r1 Gessler Wilms tumor Homo sapiens cDNA clone IMAGE:897587 5' similar to TR:G487418
6966	19543	32367	1.25	1.0E-100	BF376478.1	EST_HUMAN	G487418 ACTIN FILAMENT-ASSOCIATED PROTEIN ;
6974	19550	32375	8.47	1.0E-100	X04571.1	NT	MR1-TN0046-060900-004-605 TN0046 Homo sapiens cDNA
8489	21009	33926	12.09	1.0E-100	BF103863.1	EST_HUMAN	MR1-TN0046-060900-004-605 TN0046 Homo sapiens cDNA
8503	21042		4.61	1.0E-100	AL163203.2	NT	Human mRNA for kidney epidermal growth factor (EGF) precursor
8944	21482	34404	0.97	1.0E-100	AU118951.1	EST_HUMAN	601647357F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:3931310 5'
8944	21482	34405	0.67	1.0E-100	AU118951.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C003
9159	21694	34638	3.35	1.0E-100	AB040918.1	NT	AU118951 HEMBA1 Homo sapiens cDNA clone HEMBA1000343 5'
9234	21956		1.96	1.0E-100	AI972388.1	EST_HUMAN	AU118951 HEMBA1 Homo sapiens cDNA clone HEMBA1000343 5'
9354	20293	33192	1.65	1.0E-100	AW988611.1	EST_HUMAN	Homo sapiens mRNA for KIAA1485 protein, partial cds
9407	21916		1.74	1.0E-100	AU127720.1	EST_HUMAN	wr37g09.x1 NCL_CGAP_P128 Homo sapiens cDNA clone IMAGE:2489920 3' similar to contains element MER22 repetitive element ;
9504	22004	34981	2.84	1.0E-100	AB046846.1	NT	PMO-BN0065-100300-001-c06 BN0065 Homo sapiens cDNA
9757	22255	35237	1.91	1.0E-100	AW630487.1	EST_HUMAN	AU127720 NT2RP2 Homo sapiens cDNA clone NT2RP2001918 5'
9757	22255	35238	1.81	1.0E-100	AW630487.1	EST_HUMAN	Homo sapiens mRNA for KIAA1628 protein, partial cds
9917	22413	35388	0.5	1.0E-100	AV732101.1	EST_HUMAN	h83c11.y1 NCL_CGAP_GU1 Homo sapiens cDNA clone IMAGE:2969396 5'
10366	22860	35853	1.46	1.0E-100	BF347519.1	EST_HUMAN	h83c11.y1 NCL_CGAP_GU1 Homo sapiens cDNA clone IMAGE:2969396 5'
10452	22946		1.38	1.0E-100	Y10391.1	NT	AV732101 HTF Homo sapiens cDNA clone HTFBIG01 5'
10638	23170	36181	7.35	1.0E-100	BF327292.1	EST_HUMAN	602020554F1 NCL_CGAP_Brr67 Homo sapiens cDNA clone IMAGE:4156165 5'
11166	23673	36719	2.59	1.0E-100	X94633.1	NT	Human endogenous retrovirus HERV-K, pol gene
11166	23673	36720	2.59	1.0E-100	X94633.1	NT	MRO-BN0070-270300-008-h11 BN0070 Homo sapiens cDNA
11232	23763	36818	4.28	1.0E-100	AF111170.3	NT	H. sapiens CD97 gene exon 4
11232	23763	36819	4.28	1.0E-100	AF111170.3	NT	H. sapiens CD97 gene exon 4
11261	12682	25138	2.14	1.0E-100	AL163247.2	NT	Homo sapiens 14q32 Jagged2 gene, complete cds; and unknown gene
11529	23977		1.65	1.0E-100	AF266285.1	NT	Homo sapiens 14q32 Jagged2 gene, complete cds; and unknown gene
11663	24100	37150	9.41	1.0E-100	AF240786.1	NT	Homo sapiens chromosome 21 segment HS21C047
12000	24306	30990	2.92	1.0E-100	11545732	NT	Homo sapiens golgin-like protein (GLP) gene, complete cds
12642	24717	30968	3.53	1.0E-100	11417974	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
							Homo sapiens SH3-domain binding protein 1 (SH3BP1), mRNA
							Homo sapiens transcobalamin II; macrocytic anemia (TCN2), mRNA

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
81	12758	25240	2.04	1.0E-101	7110714	NT	Homo sapiens SEC14 (S. cerevisiae)-like 2 (SEC14L2), mRNA
81	12758	25241	2.04	1.0E-101	7110714	NT	Homo sapiens SEC14 (S. cerevisiae)-like 2 (SEC14L2), mRNA
715	13336	25622	1.77	1.0E-101	AB007815.2	NT	Homo sapiens mRNA for KIAA0446 protein, partial cds
733	13353	25648	5.29	1.0E-101	7110734	NT	Homo sapiens ventral anterior homeobox 2 (VAX2), mRNA
733	13353	25649	5.29	1.0E-101	7110734	NT	Homo sapiens ventral anterior homeobox 2 (VAX2), mRNA
803	13420	25625	3.37	1.0E-101	7637434	NT	Homo sapiens pescadillo (zebrafish) homolog 1, containing BRCT domain (PES1), mRNA
888	13500	26018	1.96	1.0E-101	4503914	NT	Homo sapiens phosphoribosylglycinamide formyltransferase, phosphoribosylglycinamide synthetase, phosphoribosylaminimidazole synthetase (GART) mRNA
961	13572	26088	0.88	1.0E-101	Z20656.1	NT	Homo sapiens of cardiac alpha-myosin heavy chain gene
1022	13632	26149	24.99	1.0E-101	BF681218.1	EST_HUMAN	602156474F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4297291 5'
1090	13695	26204	1.58	1.0E-101	A1221878.1	EST_HUMAN	gg9609.x1 Soares_NFL_T_GBC_ST Homo sapiens cDNA clone IMAGE:1843338 3'
1782	14372	26917	0.9	1.0E-101	7662183	NT	Homo sapiens KIAA0569 gene product (KIAA0569), mRNA
1782	14372	26918	0.9	1.0E-101	7662183	NT	Homo sapiens KIAA0569 gene product (KIAA0569), mRNA
1988	14570	27132	1.64	1.0E-101	4502986	NT	Homo sapiens carboxypeptidase A1 (pancreatic) (CPA1) mRNA
2101	14680	27248	1.93	1.0E-101	BE843070.1	EST_HUMAN	RC3-ST0281-160600-018-009 ST0281 Homo sapiens cDNA
2388	15465	27528	1.24	1.0E-101	5729892	NT	Homo sapiens A kinase (PRKA) anchor protein 6 (AKAP6), mRNA
2846	15205	27778	10.93	1.0E-101	X72983.1	NT	H. sapiens EWS gene, exon 5
2771	15324	27891	2.71	1.0E-101	AJ237744.1	NT	Homo sapiens RIBIR gene (partial), exon 12
2771	15324	27892	2.71	1.0E-101	AJ237744.1	NT	Homo sapiens RIBIR gene (partial), exon 12
2882	15568		10.39	1.0E-101	AJ252312.1	NT	Homo sapiens genomic downstream Rhesus box
3237	15849	28330	2.92	1.0E-101	4885270	NT	Homo sapiens gamma-glutamyltransferase 1 (GGT1) mRNA
3278	16089		2.37	1.0E-101	BF033327.1	EST_HUMAN	601458531F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3862086 5'
3427	16035	28515	1.94	1.0E-101	AW965556.1	EST_HUMAN	EST37629 MAGE resequences, MAGI Homo sapiens cDNA
3447	15324	27891	2.93	1.0E-101	AJ237744.1	NT	Homo sapiens RIBIR gene (partial), exon 12
3447	15324	27892	2.93	1.0E-101	AJ237744.1	NT	Homo sapiens RIBIR gene (partial), exon 12
3945	16543	29010	4.29	1.0E-101	AB022785.1	NT	Homo sapiens ASH2L gene, complete cds, similar to Drosophila ash2 gene
5185	17750	30180	1.38	1.0E-101	5921460	NT	Homo sapiens butyrophilin, subfamily 2, member A1 (BTN2A1), mRNA
5185	17750	30181	1.38	1.0E-101	5921460	NT	Homo sapiens butyrophilin, subfamily 2, member A1 (BTN2A1), mRNA
5521	18153	30567	1.26	1.0E-101	AW965139.1	EST_HUMAN	EST377212 MAGE resequences, MAGI Homo sapiens cDNA
6154	18767	31530	3.48	1.0E-101	7427512	NT	Homo sapiens cytoplasmic linker 2 (CYLN2), mRNA
6154	18767	31531	3.48	1.0E-101	7427512	NT	Homo sapiens cytoplasmic linker 2 (CYLN2), mRNA
6798	19387	32203	1.06	1.0E-101	11430734	NT	Homo sapiens carbonic anhydrase VII (CA7), mRNA
7317	19844		1.18	1.0E-101	11545780	NT	Homo sapiens hypothetical protein FLJ22087 (FLJ22087), mRNA
7361	19887	32749	4.87	1.0E-101	AF208970.1	NT	Homo sapiens Kuppel-type zinc finger protein (PEG3) mRNA, alternative splice form 4, partial cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7361	19887	32750	4.87	1.0E-101	AF208970.1	NT	Homo sapiens Kruppel-type zinc finger protein (PEG3) mRNA, alternative splice form 4, partial cds
7491	20014	32880	11.99	1.0E-101	AW008475.1	EST_HUMAN	wy55f12.x1 NCL CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2533487 3'
7576	20082		1.86	1.0E-101	BE257384.1	EST_HUMAN	601109217F1 NIH_MGC_18 Homo sapiens cDNA clone IMAGE:3349601 5'
7707	20216	33104	7.87	1.0E-101	BF330759.1	EST_HUMAN	RC1-BT0313-220700-018-f12 BT0313 Homo sapiens cDNA
7854	20396	33301	0.98	1.0E-101	BE275821.1	EST_HUMAN	601121821F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3345869 5'
7854	20396	33302	0.98	1.0E-101	BE275821.1	EST_HUMAN	601121821F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3345869 5'
7999	20541	33443	6.69	1.0E-101	BF029174.1	EST_HUMAN	601784886F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3968637 5'
8264	20805	33722	0.66	1.0E-101	AW630070.1	EST_HUMAN	h174g10.y1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988578 5' similar to gb.J03143 INTERFERON-GAMMA RECEPTOR ALPHA CHAIN PRECURSOR (HUMAN);
8264	20805	33723	0.66	1.0E-101	AW630070.1	EST_HUMAN	h174g10.y1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2988578 5' similar to gb.J03143 INTERFERON-GAMMA RECEPTOR ALPHA CHAIN PRECURSOR (HUMAN);
8940	21478	34399	1.55	1.0E-101	AA036800.1	EST_HUMAN	zK29g08.r1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:471898 5' similar to PIR-S54640 S54640 YD9335.03c protein - yeast;
9253	21779	34730	0.8	1.0E-101	AB037772.1	NT	Homo sapiens mRNA for KIAA1351 protein, partial cds
9253	21779	34731	0.8	1.0E-101	AB037772.1	NT	Homo sapiens mRNA for KIAA1351 protein, partial cds
9383	20321	33225	17.2	1.0E-101	X60089.1	NT	Human mRNA for pancreatic gamma-glutamyltransferase
9383	20321	33226	17.2	1.0E-101	X60089.1	NT	Human mRNA for pancreatic gamma-glutamyltransferase
9386	21819	34769	16.05	1.0E-101	9845492	NT	Homo sapiens gamma-glutamyltransferase 1 (GGT1), transcript variant 3, mRNA
9672	22171	35146	12.54	1.0E-101	BE619687.1	EST_HUMAN	601472808T1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3875953 3'
9672	22171	35147	12.54	1.0E-101	BE619687.1	EST_HUMAN	601472808T1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3875953 3'
9808	22306	35280	0.65	1.0E-101	10863960	NT	Homo sapiens potassium channel, subfamily K, member 10 (KCNK10), mRNA
10308	22802	35794	1.71	1.0E-101	11429127	NT	Homo sapiens Janus kinase 2 (a protein tyrosine kinase) (JAK2), mRNA
10337	22831	35825	5.16	1.0E-101	AI570293.1	EST_HUMAN	1077d11.x1 NCL CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2184309 3' similar to gb.M26326 KERATIN, TYPE I CYTOSKELETAL 18 (HUMAN);
10337	22831	35826	5.16	1.0E-101	AI570293.1	EST_HUMAN	1077d11.x1 NCL CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2184309 3' similar to gb.M26326 KERATIN, TYPE I CYTOSKELETAL 18 (HUMAN);
10442	22836	35945	0.85	1.0E-101	BE973648.1	EST_HUMAN	601880825F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:3950887 5'
10442	22836	35946	0.85	1.0E-101	BE973648.1	EST_HUMAN	601880825F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:3950887 5'
10757	23281	36295	1.63	1.0E-101	S38327.1	NT	branched-chain alpha-keto acid dehydrogenase complex E1 alpha subunit [human, Genomic, 195 nt, segment 8 of 9]
10988	23502	36532	1.68	1.0E-101	AB020626.1	NT	Homo sapiens mRNA for KIAA0819 protein, partial cds
11620	24062	37126	18.03	1.0E-101	AA321316.1	EST_HUMAN	EST23783 Bone marrow Homo sapiens cDNA 5' end similar to defensin 1
12274	24478		15.99	1.0E-101	AW939051.1	EST_HUMAN	QV1-DT0068-240200-085-a01 DT0068 Homo sapiens cDNA
43	12722	25183	0.8	1.0E-102	AF012872.1	NT	Homo sapiens phosphatidylinositol 4-kinase 230 (pi4K230) mRNA, complete cds

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
363	13012	25494	4.36	1.0E-102	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
648	13271	25749	1.2	1.0E-102	BE252470.1	EST_HUMAN	601108292F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3344326 5'
807	13424	25930	1.24	1.0E-102	4557534	NT	Homo sapiens down-regulated in adenoma (DRA) mRNA
1156	13759	26269	5.78	1.0E-102	M10976.1	NT	Human endogenous retroviral DNA (4-1), complete retroviral segment
1311	13905	26424	3.09	1.0E-102	11437148	NT	Homo sapiens solute carrier family 2 (facilitated glucose transporter), member 9 (SLC2A9), mRNA
1311	13905	26425	3.09	1.0E-102	11437148	NT	Homo sapiens solute carrier family 2 (facilitated glucose transporter), member 9 (SLC2A9), mRNA
1327	13921	26442	1.92	1.0E-102	4826977	NT	Homo sapiens reelin (RELN) mRNA
1464	14056	26589	184.12	1.0E-102	BE408447.1	EST_HUMAN	601289982F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3629801 5'
2348	14919	27463	1.34	1.0E-102	AI124669.1	EST_HUMAN	am60c10.x1 Johnston frontal cortex Homo sapiens cDNA clone IMAGE:1539954 3' similar to SW:GG95_HUMAN Q08379 GOLGIN-95 ;
2348	14919	27494	1.34	1.0E-102	AI124669.1	EST_HUMAN	am60c10.x1 Johnston frontal cortex Homo sapiens cDNA clone IMAGE:1539954 3' similar to SW:GG95_HUMAN Q08379 GOLGIN-95 ;
3101	15716	28187	1.56	1.0E-102	7661979	NT	Homo sapiens KIAA0187 gene product (KIAA0187), mRNA
3167	15781	28251	4.07	1.0E-102	AU141005.1	EST_HUMAN	AU141005 PLACE4 Homo sapiens cDNA clone PLACE4000650 5'
3167	15781	28252	4.07	1.0E-102	AU141005.1	EST_HUMAN	AU141005 PLACE4 Homo sapiens cDNA clone PLACE4000650 5'
4316	16902	29346	1.84	1.0E-102	AL163207.2	NT	Homo sapiens chromosome 21 segment HS21C007
4503	17087	29335	2.55	1.0E-102	BE251310.1	EST_HUMAN	601107843F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3343882 5'
5287	17649	30275	1.19	1.0E-102	R66468.1	EST_HUMAN	Y32604.t1 Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:140934 5'
5574	18205	30656	1.66	1.0E-102	AF067133.1	NT	Homo sapiens protein phosphatase-1 regulatory subunit 7 (PPP1R7) gene, exon 7
5923	18545		4.52	1.0E-102	AB034951.1	NT	Homo sapiens HSC54 mRNA for heat shock cognate protein 54, complete cds
5957	18579	31313	2.43	1.0E-102	7705398	NT	Homo sapiens histone deacetylase 7 (HDAC7), mRNA
5957	18579	31314	2.43	1.0E-102	7705398	NT	Homo sapiens histone deacetylase 7 (HDAC7), mRNA
5962	18584	31318	0.75	1.0E-102	11433046	NT	Homo sapiens hct domain and RLD 2 (HERC2), mRNA
6435	19038	31825	2.89	1.0E-102	AI459825.1	EST_HUMAN	ar82f09.x1 Barstead colon HPLR87 Homo sapiens cDNA clone IMAGE:2151785 3' similar to TR:Q13137 Q13137 NDP52 ;
7180	19722	32570	0.67	1.0E-102	BE729023.1	EST_HUMAN	601581505F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3831241 5'
7217	19748	32604	0.93	1.0E-102	BE386106.1	EST_HUMAN	601272715F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3618243 5'
7392	19917	32761	7.37	1.0E-102	AJ238994.1	NT	Homo sapiens mRNA for Centaurin-alpha2 protein
7620	20133	33010	2.75	1.0E-102	AV710738.1	EST_HUMAN	AV710738 Cu Homo sapiens cDNA clone CUAACKD03 5'
8165	20760	33622	3.41	1.0E-102	BE763051.1	EST_HUMAN	QV3-NT0025-210600-236-08 NT0025 Homo sapiens cDNA
8244	20765	33704	1.5	1.0E-102	BE910555.1	EST_HUMAN	601501107F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3903145 5'
8431	20971	33883	1.65	1.0E-102	AV694817.1	EST_HUMAN	AV694817 GK Homo sapiens cDNA clone GKCEEE11 5'
8431	20971	33884	1.65	1.0E-102	AV694817.1	EST_HUMAN	AV694817 GK Homo sapiens cDNA clone GKCEEE11 5'
8539	21078	33987	0.62	1.0E-102	AB007923.1	NT	Homo sapiens mRNA for KIAA0454 protein, partial cds

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8861	21400	34324	0.75	1.0E-102	BE388063.1	EST_HUMAN	601283770F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3605536 5'
8861	21400	34325	0.75	1.0E-102	BE388063.1	EST_HUMAN	601283770F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3605536 5'
9175	21752	34898	0.57	1.0E-102	AI762859.1	EST_HUMAN	wf63b06.xt NCI_CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2397971 3' similar to contains MER4.11
9205	21722	34866	0.76	1.0E-102	AV755842.1	EST_HUMAN	MER4 MER4 repetitive element;
9245	21771	34719	2.15	1.0E-102	IT0393.1	EST_HUMAN	AV755842 BM Homo sapiens cDNA clone BMFAUD06 5'
9245	21771	34720	2.15	1.0E-102	IT0393.1	EST_HUMAN	yt13d07.r1 Soares fetal liver spleen 1NLS Homo sapiens cDNA clone IMAGE:67021 5'
9332	21748	34796	3.3	1.0E-102	AU124629.1	EST_HUMAN	yt13d07.r1 Soares fetal liver spleen 1NLS Homo sapiens cDNA clone IMAGE:67021 5'
10284	22779		0.54	1.0E-102	AF153715.1	NT	AU124629 NT2RM4 Homo sapiens cDNA clone NT2RM4000309 5'
10365	22859	35851	3.54	1.0E-102	A905037.1	EST_HUMAN	Homo sapiens phospholipid scramblase 1 gene, exon 1 and 5' flanking region
10365	22859	35852	3.54	1.0E-102	A905037.1	EST_HUMAN	RC-BT074-260499-014 BT074 Homo sapiens cDNA
10422	22916	35916	1.58	1.0E-102	AA970786.1	EST_HUMAN	RC-BT074-260499-014 BT074 Homo sapiens cDNA
10949	23464	36486	1.83	1.0E-102	BE897468.1	EST_HUMAN	on57h04.s1 Soares NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1560823 3' similar to
10952	23467	36490	6.26	1.0E-102	4507822	NT	SW:CAV2_HUMAN P51636 CAVEOLIN-2. [1];
10952	23467	36491	6.26	1.0E-102	4507822	NT	601439392F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3924166 5'
11200	23705	36756	1.54	1.0E-102	AA868675.1	EST_HUMAN	Homo sapiens UDP glycosyltransferase 2 family, polypeptide B11 (UGT2B11) mRNA
11282	23735	36780	3.6	1.0E-102	BF359243.1	EST_HUMAN	Homo sapiens UDP glycosyltransferase 2 family, polypeptide B11 (UGT2B11) mRNA
11555	24003	37076	3.68	1.0E-102	U41302.1	NT	ak49h10.s1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1409347 3'
11889	24105		8.01	1.0E-102	AL163280.2	NT	RC6-ET0072-150600-011-F01 ET0072 Homo sapiens cDNA
12261	24471	30931	6.87	1.0E-102	AW300862.1	EST_HUMAN	Human chromosome 16 creatine transporter (SLC6A8) and (CDM) paralogous genes, complete cds
12588	24681		1.79	1.0E-102	J05235.1	NT	Homo sapiens chromosome 21 segment HS21C080
73	12751	25229	2.49	1.0E-103	BE908158.1	EST_HUMAN	X407c12.x1 NCI_CGAP_Co20 Homo sapiens cDNA clone IMAGE:2666038 3'
73	12751	25230	2.49	1.0E-103	BE908158.1	EST_HUMAN	Human gamma-glutamyl transpeptidase mRNA, complete cds
104	12780	25282	8.29	1.0E-103	D87078.2	NT	601500405F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3902305 5'
222	12883	25368	2.74	1.0E-103	5453793	NT	601500405F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3902305 5'
1017	13927	26140	0.82	1.0E-103	AJ278348.1	NT	Homo sapiens mRNA for KIAA0235 protein, partial cds
1286	13881	26406	10.5	1.0E-103	BE877541.1	EST_HUMAN	Homo sapiens nuclear protein (KKE/D repeat) (NOP56) mRNA
1840	14232	26766	2.28	1.0E-103	AF012872.1	NT	Homo sapiens mRNA for pregnancy-associated plasma protein-E (PAPPE gene)
2018	14600	27163	1.43	1.0E-103	4502428	NT	601485388F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3887876 5'
2018	14600	27164	1.43	1.0E-103	4502428	NT	Homo sapiens phosphatidylinositol 4-kinase 230 (p4K230) mRNA, complete cds
2343	14914	27488	1	1.0E-103	AU134991.1	EST_HUMAN	Homo sapiens bone morphogenetic protein 8 (osteogenic protein 2) (BMP8) mRNA
2494	15058	27632	1.88	1.0E-103	AF060568.1	NT	Homo sapiens bone morphogenetic protein 8 (osteogenic protein 2) (BMP8) mRNA
							Homo sapiens promyelocytic leukemia zinc finger protein (PLZF) gene, complete cds

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2631	15192	27762	1.54	1.0E-103	BF529379.1	EST_HUMAN	802041882F1 NCI_CGAP_Brn87 Homo sapiens cDNA clone IMAGE:4179428 5'
2631	15192	27763	1.54	1.0E-103	BF529379.1	EST_HUMAN	802041882F1 NCI_CGAP_Brn87 Homo sapiens cDNA clone IMAGE:4179428 5'
3105	15720		2.9	1.0E-103	BE744722.1	EST_HUMAN	801573113F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3834315 5'
3428	18034	28514	3.71	1.0E-103	AW288245.1	EST_HUMAN	U1-HBW0-ajh-11-q-U1.s1 NCI_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:2733165 3'
3487	16092	28564	1.19	1.0E-103	AB040892.1	NT	Homo sapiens mRNA for KIAA1459 protein, partial cds
3818	16418		6.77	1.0E-103	AF023861.1	NT	Macaca mulatta cyclophilin A mRNA, complete cds
3861	16459	28923	1.17	1.0E-103	AA485663.1	EST_HUMAN	ab10d12.s1 Stragene lung (#837210) Homo sapiens cDNA clone IMAGE:840407 3' similar to contains element LTR10 repetitive element
4075	16671	29132	3.62	1.0E-103	T23683.1	EST_HUMAN	seq340 b4HB3MA-Cot109*10-Bio Homo sapiens cDNA clone b4HB3MA-Cot109*10-Bio-7 3'
4946	17521	29963	0.68	1.0E-103	BE900203.1	EST_HUMAN	801873135F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3955953 5'
6091	18707	31455	0.73	1.0E-103	BF569527.1	EST_HUMAN	802186023F1 NIH_MGC_45 Homo sapiens cDNA clone IMAGE:4310573 5'
6097	18713	31463	1.8	1.0E-103	AF179985.1	NT	Homo sapiens septin 2 (SEP2) mRNA, partial cds
6413	19016	31788	0.71	1.0E-103	11435053	NT	Homo sapiens KIAA0440 protein (KIAA0440), mRNA
6413	19016	31789	0.71	1.0E-103	11435053	NT	Homo sapiens KIAA0440 protein (KIAA0440), mRNA
6587	19184	31985	0.78	1.0E-103	AW954568.1	EST_HUMAN	EST366638 MAGC resequences, MAGC Homo sapiens cDNA
6587	19184	31986	0.78	1.0E-103	AW954568.1	EST_HUMAN	EST366636 MAGC resequences, MAGC Homo sapiens cDNA
6707	24767	32106	1.16	1.0E-103	AA781442.1	EST_HUMAN	aj26603.s1 Soares testis_NHT Homo sapiens cDNA clone 1391452 3'
6743	19337	32142	0.86	1.0E-103	AF053480.1	NT	Homo sapiens glycine receptor alpha 2 subunit (GLRA2) gene, exon 4
6819	19409	32227	1.69	1.0E-103	AI590071.1	EST_HUMAN	tm58b05.x1 NCI_CGAP_Brn25 Homo sapiens cDNA clone IMAGE:2162289 3' similar to TR:Q13769
6819	19409	32228	1.69	1.0E-103	AI590071.1	EST_HUMAN	tm58b05.x1 NCI_CGAP_Brn25 Homo sapiens cDNA clone IMAGE:2162289 3' similar to TR:Q13769
6933	18041	30484	1.67	1.0E-103	5032282	NT	Homo sapiens dystrophin (muscular dystrophy, Duchenne and Becker types), includes DXS142, DXS164, DXS206, DXS230, DXS239, DXS268, DXS269, DXS270, DXS272 (DMD), transcript variant Dp427m, mRNA
6933	18041	30485	1.67	1.0E-103	5032282	NT	Homo sapiens dystrophin (muscular dystrophy, Duchenne and Becker types), includes DXS142, DXS164, DXS206, DXS230, DXS239, DXS268, DXS269, DXS270, DXS272 (DMD), transcript variant Dp427m, mRNA
7047	18067	30457	1.07	1.0E-103	11431100	NT	Homo sapiens ribosomal protein L3-like (RPL3L), mRNA
7101	18671	32510	1.13	1.0E-103	AJ289880.1	NT	Homo sapiens KIAA0851 gene (partial), XT3 gene and LZTFL1 gene
7278	18606	32665	1.34	1.0E-103	AW965776.1	EST_HUMAN	EST377848 MAGC resequences, MAGC Homo sapiens cDNA
7372	18898	32759	3.38	1.0E-103	BE748158.1	EST_HUMAN	801571537F1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:3838945 5'
7749	20257	33152	4.44	1.0E-103	AI590071.1	EST_HUMAN	tm58b05.x1 NCI_CGAP_Brn25 Homo sapiens cDNA clone IMAGE:2162289 3' similar to TR:Q13769

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7749	20257	33153	4.44	1.0E-103	AI590071.1	EST_HUMAN	Im58b05.x1 NCI CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2162289 3' similar to TR:Q13789
8556	21095	34015	1.14	1.0E-103	AU140344.1	EST_HUMAN	Q13789 ANONYMOUS. ;
8556	21095	34016	1.14	1.0E-103	AU140344.1	EST_HUMAN	AU140344 PLACE2 Homo sapiens cDNA clone PLACE2000374 5'
8837	21176	34085	1.13	1.0E-103	BF109244.1	EST_HUMAN	AU140344 PLACE2 Homo sapiens cDNA clone PLACE2000374 5'
9036	21573	34502	2.82	1.0E-103	6005921	NT	760603.x1 Soares_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3525964 3' similar to SW:PTNF_HUMAN Q16825 PROTEIN-TYROSINE PHOSPHATASE D1 ;
9036	21573	34503	2.82	1.0E-103	6005921	NT	Homo sapiens triple functional domain (PTPRF interacting) (TRIO), mRNA
9075	21612	34544	1.06	1.0E-103	AA581086.1	EST_HUMAN	Homo sapiens triple functional domain (PTPRF interacting) (TRIO), mRNA
9117	21653	34594	1.29	1.0E-103	AA774980.1	EST_HUMAN	nd13602.x1 NCI CGAP_Ov1 Homo sapiens cDNA clone IMAGE:800162 3' similar to gb:L02426 26S
9970	22465	35449	1.55	1.0E-103	Z37876.1	NT	PROTEASE SUBUNIT 4 (HUMAN);
10011	22506	35497	1.64	1.0E-103	AW963876.1	EST_HUMAN	ae84d12.s1 Strategene schizo brain S11 Homo sapiens cDNA clone IMAGE:970871 3' similar to gb:X03747_cds1 SODIUM/POTASSIUM-TRANSPORTING ATPASE BETA-1 (HUMAN);
10137	22632	35621	9.06	1.0E-103	AI878956.1	EST_HUMAN	H. sapiens mRNA for latent transforming growth factor-beta binding protein (LTBP-2)
10521	23059	36069	2.78	1.0E-103	BE549706.1	EST_HUMAN	EST1375749 MAGE resequences, MAGH Homo sapiens cDNA
10612	23145	36156	3.46	1.0E-103	AI792759.1	EST_HUMAN	au51904.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2518326 5' similar to TR:O15046 KIAA0338 ;
10713	23241	36257	2.21	1.0E-103	11424061	NT	7b41f03.x1 NCI CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3230813 3' similar to gb:M69043 MAJOR HISTOCOMPATIBILITY COMPLEX ENHANCER-BINDING PROTEIN (HUMAN);
10713	23241	36258	2.21	1.0E-103	11424061	NT	0102d06.y2 NCI CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1522283 5' similar to TR:Q62084 Q62084 PHOSPHOLIPASE C NEIGHBORING ;
10724	23251	36266	3.66	1.0E-103	AF149773.1	NT	Homo sapiens AXL receptor tyrosine kinase (AXL), mRNA
10724	23251	36267	3.66	1.0E-103	AF149773.1	NT	Homo sapiens AXL receptor tyrosine kinase (AXL), mRNA
11253	23783	36839	2.51	1.0E-103	AU136283.1	EST_HUMAN	Homo sapiens NOD1 protein (NOD1) gene, exons 1, 2, and 3
11320	23018	36027	5.36	1.0E-103	L43610.1	NT	Homo sapiens NOD1 protein (NOD1) gene, exons 1, 2, and 3
11590	24033	37103	4.36	1.0E-103	BE644611.1	EST_HUMAN	AU136283 PLACE1 Homo sapiens cDNA clone PLACE1003923 5'
11694	24101		2.23	1.0E-103	AF224669.1	NT	Homo sapiens polycystic kidney disease (PKD1) gene, exons 27-30
11717	24126		1.91	1.0E-103	11526291	NT	7e68a10.x1 Soares_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3287610 3' similar to contains MER29.13 MER29 repetitive element ;
11916	24254	31010	2.98	1.0E-103	AB011399.1	NT	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
254	12914	25398	4.81	1.0E-104	AL037549.3	EST_HUMAN	Homo sapiens hypothetical protein FLJ20454 (FLJ20454), mRNA
254	12914	25399	4.81	1.0E-104	AL037549.3	EST_HUMAN	Homo sapiens gene for AF-6, complete cds
							DKFZp564H1072_r1 564 (synonym: hfr2) Homo sapiens cDNA clone DKFZp564H1072 5'
							DKFZp564H1072_r1 564 (synonym: hfr2) Homo sapiens cDNA clone DKFZp564H1072 5'

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Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1832	14516	27072	2.06	1.0E-104	4502428	NT	Homo sapiens bone morphogenetic protein 8 (osteoinductive protein 2) (BMP8) mRNA
2235	14810	27382	2.22	1.0E-104	AA132875.1	EST_HUMAN	z022006.s1 Striatagene cdon (#837204) Homo sapiens cDNA clone IMAGE:587628 3' similar to gb:Z14116 .mat CD59 GLYCOPROTEIN PRECURSOR (HUMAN);
2245	14819	27394	1.47	1.0E-104	BE744628.1	EST_HUMAN	601577460F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3926438 5'
2407	14975	27548	0.89	1.0E-104	BF334221.1	EST_HUMAN	RC1-CT0249-110900-214-f12 CT0249 Homo sapiens cDNA
2407	14975	27549	0.89	1.0E-104	BF334221.1	EST_HUMAN	RC1-CT0249-110900-214-f12 CT0249 Homo sapiens cDNA
2481	15047	27616	1.28	1.0E-104	5031570	NT	Homo sapiens ARP2 (actin-related protein 2, yeast) homolog (ACTR2), mRNA
2896	15513	27883	8.17	1.0E-104	M34671.1	NT	Human lymphocyte antigen CD59/MEM43 mRNA, complete cds
2941	15557		3.21	1.0E-104	Y11151.1	NT	H. sapiens gene encoding phenylpyruvate tautomerase II
3438	16048		1.77	1.0E-104	AA319436.1	EST_HUMAN	EST21658 Adrenal gland tumor Homo sapiens cDNA 5' end
3661	16263	28735	0.63	1.0E-104	AB033102.1	NT	Homo sapiens mRNA for KIAA1276 protein, partial cds
3661	16263	28736	0.63	1.0E-104	AB033102.1	NT	Homo sapiens mRNA for KIAA1276 protein, partial cds
4015	16613	28086	1.2	1.0E-104	AB032998.1	NT	Homo sapiens mRNA for KIAA1172 protein, partial cds
4210	16789	29248	0.62	1.0E-104	F11745.1	EST_HUMAN	HSC31A071 normalized infant brain cDNA Homo sapiens cDNA clone c-31a07
4466	17052	29496	6.67	1.0E-104	X02761.1	NT	Human mRNA for fibronectin (FN precursor)
4715	17286	29740	1.28	1.0E-104	AF231920.1	NT	Homo sapiens chromosome 21 unknown mRNA
4715	17286	29741	1.28	1.0E-104	AF231920.1	NT	Homo sapiens chromosome 21 unknown mRNA
5330	17891	30305	1.84	1.0E-104	4502152	NT	Homo sapiens apolipoprotein B (including Ag(x) antigen) (APOB) mRNA
6095	18711	31459	1.18	1.0E-104	U43379.1	NT	Human Down Syndrome region of chromosome 21 DNA
6095	18711	31460	1.18	1.0E-104	U43379.1	NT	Human Down Syndrome region of chromosome 21 DNA
6139	18753	31511	0.98	1.0E-104	AB017332.1	NT	Homo sapiens aik3 mRNA for Auroral/pt1-related kinase 3, complete cds
6593	19190	31993	8.25	1.0E-104	AI768797.1	EST_HUMAN	KIAA0132 PROTEIN, contains element LTR7 repetitive element ;
6593	19190	31994	8.25	1.0E-104	AI768797.1	EST_HUMAN	wi03b12.x1 NCL CGAP_Kic12 Homo sapiens cDNA clone IMAGE:2401727 3' similar to TR:Q14145 Q14145
6758	19349	32158	1.07	1.0E-104	7706512	NT	KIAA0132 PROTEIN, contains element LTR7 repetitive element ;
6895	19629	32465	1.48	1.0E-104	BE314182.1	EST_HUMAN	Homo sapiens PDZ domain-containing guanine nucleotide exchange factor I (LOC51735), mRNA
6895	19629	32466	1.48	1.0E-104	BE314182.1	EST_HUMAN	601150451F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3503220 5'
7276	19804	32663	2.22	1.0E-104	11425572	NT	601150451F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3503220 5'
8533	21072	33992	0.71	1.0E-104	BF509244.1	EST_HUMAN	Homo sapiens adaptor-related protein complex 2, beta 1 subunit (AP2B1), mRNA
9094	21630	34568	2.56	1.0E-104	BF448230.1	EST_HUMAN	U1-H-B14-acc-b-09-0-U1.s1 NCL CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3086176 3'
9187	21704	34646	0.6	1.0E-104	AA682308.1	EST_HUMAN	nacl16g11.x1 NCL CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3385948 3'
9208	21725		1.62	1.0E-104	T74219.1	EST_HUMAN	z988005.s1 Soares fetal_liver_spleen_1NFSL_S1 Homo sapiens cDNA clone IMAGE:462897 3'
9238	21784	34710	4.74	1.0E-104	AF091395.1	NT	yc83102.1 Soares infant brain 1NIB Homo sapiens cDNA clone IMAGE:22440 5'
							Homo sapiens Trio isoform mRNA, complete cds

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9238	21764	34711	4.74	1.0E-104	AF081395.1	NT	Homo sapiens T10 isoform mRNA, complete cds
9362	20301	33201	4.6	1.0E-104	BF352841.1	EST_HUMAN	IL3-HT0619-080900-249-F07 HT0619 Homo sapiens cDNA
9362	20301	33202	4.6	1.0E-104	BF352841.1	EST_HUMAN	IL3-HT0619-080900-249-F07 HT0619 Homo sapiens cDNA
9668	22167	35142	0.69	1.0E-104	AW103848.1	EST_HUMAN	xd76d02.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2603523 3' similar to TR:Q24116
9668	22167	35143	0.69	1.0E-104	AW103848.1	EST_HUMAN	xd76d02.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2603523 3' similar to TR:Q24116
9668	22355	35338	0.54	1.0E-104	AF113514.1	NT	Homo sapiens histone acetyltransferase MORF mRNA, complete cds
10005	22500	35490	3.86	1.0E-104	BE791713.1	EST_HUMAN	601581503F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3935977 5'
10005	22500	35491	3.86	1.0E-104	BE791713.1	EST_HUMAN	601581503F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3935977 5'
10299	22793	35783	1.05	1.0E-104	AV728070.1	EST_HUMAN	AV728070 HTC Homo sapiens cDNA clone H7C8YA07 5'
10338	22832	35827	4.98	1.0E-104	AU130765.1	EST_HUMAN	AU130765 NT2RP3 Homo sapiens cDNA clone NT2RP3001368 5'
10445	22939	35949	3.94	1.0E-104	U66535.1	NT	Human beta4-integrin (ITGB4) gene, exons 19,20,21,22,23,24 and 25
10457	22951		1.04	1.0E-104	11427757	NT	Homo sapiens KIAA0649 gene product (KIAA0649), mRNA
11178	23883	36728	2.44	1.0E-104	BE720191.1	EST_HUMAN	RC0-HT0885-310700-021-b09 HT0885 Homo sapiens cDNA
11178	23883	36729	2.44	1.0E-104	BE720191.1	EST_HUMAN	RC0-HT0885-310700-021-b09 HT0885 Homo sapiens cDNA
11208	23712	36768	5.34	1.0E-104	BF684288.1	EST_HUMAN	602141215F1 NIH_MGC_48 Homo sapiens cDNA clone IMAGE:4302507 5'
12538	24848		2.58	1.0E-104	BE393892.1	EST_HUMAN	601312181F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3658676 5'
300	15384	25445	2.78	1.0E-105	4502166	NT	Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA
450	12879	25135	15.84	1.0E-105	4505150	NT	Homo sapiens Meis1 (mouse) homolog (MEIS1) mRNA
620	13247	25720	5.78	1.0E-105	AF032897.1	NT	Homo sapiens potassium channel subunit (HERG-3) mRNA, complete cds
620	13247	25721	5.78	1.0E-105	AF032897.1	NT	Homo sapiens potassium channel subunit (HERG-3) mRNA, complete cds
1719	14311		1.84	1.0E-105	AB020981.1	NT	Homo sapiens mRNA for cyclin B2, complete cds
1859	14447	27004	1.35	1.0E-105	AL163280.2	NT	Homo sapiens chromosome 21 segment HS21C080
1870	14554	27110	1.24	1.0E-105	D50918.1	NT	Human mRNA for KIAA0128 gene, partial cds
2231	14806	27379	1.36	1.0E-105	AA318369.1	EST_HUMAN	EST20809 Spleen I Homo sapiens cDNA 5' end similar to autoimmune antigen Ku, p70/p80 subunit
2747	15302		1.43	1.0E-105	AA584808.1	EST_HUMAN	no10405.s1 NCL_CGAP_Phe1 Homo sapiens cDNA clone IMAGE:1100265 3'
3039	15955		3.35	1.0E-105	AJ229041.1	NT	Homo sapiens 959 kb contig between AML1 and CBR1 on chromosome 21q22; segment 1/3
3394	16002	28482	0.72	1.0E-105	7304922	NT	Homo sapiens bromodomain adjacent to zinc finger domain, 2B (BAZ2B), mRNA
3394	16002	28483	0.72	1.0E-105	7304922	NT	Homo sapiens bromodomain adjacent to zinc finger domain, 2B (BAZ2B), mRNA
4173	16764	29212	2.65	1.0E-105	AW981688.1	EST_HUMAN	EST1373761 MAGE fusions, MAGE Homo sapiens cDNA
4853	17431	29881	0.65	1.0E-105	BE668881.1	EST_HUMAN	601445823F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3850156 5'
4853	17431	29882	0.65	1.0E-105	BE668881.1	EST_HUMAN	601445823F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3850156 5'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4874	17449	29800	1.08	1.0E-105	AA698335.1	EST_HUMAN	z14402.s1 Soares fetal liver spleen INFIL S1 Homo sapiens cDNA clone IMAGE:433682 3'
5073	17848		4.94	1.0E-105	AL163208.2	NT	Homo sapiens chromosome 21 segment HS21C008
5533	18185	30578	0.97	1.0E-105	AF016704.1	NT	Homo sapiens E8-AP ubiquitin-protein ligase (UBE3A) gene, exon 2
5594	18224		1.12	1.0E-105	11420134	NT	Homo sapiens Retina-derived POU-domain factor-1 (RPF-1), mRNA
6985	19483	32303	1.68	1.0E-105	BF314302.1	EST_HUMAN	601901028F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4130334 5'
6985	19483	32304	1.68	1.0E-105	BF314302.1	EST_HUMAN	601901028F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4130334 5'
7058	18077	30430	3.65	1.0E-105	11419198	NT	Homo sapiens GTPase activating protein-like (GAPL), mRNA
7058	18077	30431	3.65	1.0E-105	11419198	NT	Homo sapiens GTPase activating protein-like (GAPL), mRNA
7328	19855	32718	1.09	1.0E-105	BE902816.1	EST_HUMAN	60187278F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3980019 5'
7800	20343	33252	0.87	1.0E-105	X12556.1	NT	Human mRNA for db1 proto-oncogene
7971	20513	33420	5.88	1.0E-105	T05087.1	EST_HUMAN	EST02975 Fetal brain, Strategene (cat#936208) Homo sapiens cDNA clone HFBCR32
8337	20878	33789					ws50c10.x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2500826 3' similar to
8858	21397	34320	0.75	1.0E-105	AW007194.1	EST_HUMAN	SW-630 ACNS-1 PENCH P96333 ACETYL-COEZYME A SYNTHETASE ;
8980	21518	34444	2.92	1.0E-105	AW016879.1	EST_HUMAN	UIH-B10p-abi-b-12-0-UI.st NCI CGAP Sub2 Homo sapiens cDNA clone IMAGE:2711782 3'
9131	21686	34606	0.87	1.0E-105	AW882372.1	EST_HUMAN	QV2-OT0062-140300-083-009 OT0062 Homo sapiens cDNA
9131	21686	34607	0.87	1.0E-105	AW882372.1	EST_HUMAN	QV2-OT0062-140300-083-009 OT0062 Homo sapiens cDNA
9487	21944	34891	1.07	1.0E-105	BE867793.1	EST_HUMAN	601443755F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3847884 5'
9487	21944	34892	1.07	1.0E-105	BE867793.1	EST_HUMAN	601443755F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3847884 5'
10812	23334	36347	6.07	1.0E-105	AF254822.1	NT	Homo sapiens SMARCA4 isoform (SMARCA4) gene, complete cds, alternatively spliced
11109	23619	36660	2.15	1.0E-105	D63548.1	NT	Homo sapiens COL4A6 gene for $\alpha 6(V)$ collagen, exon 31
11161	23668	36713	2.07	1.0E-105	7705938	NT	Homo sapiens Ran binding protein 11 (LOC51194), mRNA
11457	29807	36874	2.56	1.0E-105	AW027554.1	EST_HUMAN	ww7407.x1 Soares thymus_NHFT Homo sapiens cDNA clone IMAGE:2535301 3' similar to TR:P87892
							P87892 PROTEASE ;
11524	29972	37042	1.62	1.0E-105	BF430921.1	EST_HUMAN	7c18c10.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3574291 3' similar to TR:P87890 P87890
13	12692	25148	2.29	1.0E-106	AI904463.1	EST_HUMAN	RIN1 ;
182	12825		1.55	1.0E-106	AW503208.1	EST_HUMAN	IL-BT057-281198-001 BT057 Homo sapiens cDNA
219	12880	25366	1.75	1.0E-106	AI565065.1	EST_HUMAN	UIHF-BN0-akt-q-07-0-UI.1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3078348 5'
567	13198	25678	1.82	1.0E-106	AW965556.1	EST_HUMAN	tg79c01.x1 NCI_CGAP_U11 Homo sapiens cDNA clone IMAGE:2215008 3'
633	13258	25733	2.3	1.0E-106	J00146.1	NT	EST137628 MAGI resequences, MAGI Homo sapiens cDNA
634	13258	25733	3.03	1.0E-106	J00146.1	NT	Human dihydrofolate reductase pseudogene (psl-hd1)
1572	14165	26896	1.57	1.0E-106	AF145712.1	NT	Human dihydrofolate reductase pseudogene (psl-hd1)
1739	14329	26873	4.72	1.0E-106	U48724.1	NT	Homo sapiens soluble neuropilin-1 mRNA, complete cds
							Human epidermal growth factor receptor (EGFR) precursor-mRNA, exon 4, partial cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1757	14347	26892	0.89	1.0E-106	U04510.1	NT	Homo sapiens type IV collagen alpha 5 chain (COL4A5) gene, exon 41
1839	14427	26978	5.32	1.0E-106	AA527448.1	EST_HUMAN	ng41c05.s1 NCI_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
1839	14427	26979	5.32	1.0E-106	AA527448.1	EST_HUMAN	LTR3 repetitive element
2167	14744	27313	2.48	1.0E-106	BE144286.1	EST_HUMAN	ng41c05.s1 NCI_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element
2356	14927	27501	3.35	1.0E-106	4504184	NT	LTR3 repetitive element
2636	15196	27769	1.49	1.0E-106	BE260201.1	EST_HUMAN	MRO-HT0165-140200-008-d10 HT0165 Homo sapiens cDNA
2788	15339	27910	6.89	1.0E-106	AJ276526.1	EST_HUMAN	Homo sapiens glutathione S-transferase theta 1 (GSTT1), mRNA
2852	14071	26609	1.52	1.0E-106	AJ276526.1	EST_HUMAN	601149783F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3502461 5'
2852	14071	26610	1.52	1.0E-106	4504184	NT	q176h10.x1 Soares_NIHMPu_S1 Homo sapiens cDNA clone IMAGE:1878307 3'
2899	15516	27985	0.98	1.0E-106	BE384296.1	EST_HUMAN	Homo sapiens glutathione S-transferase theta 1 (GSTT1), mRNA
2968	15583	28063	6.37	1.0E-106	AB037747.1	NT	Homo sapiens glutathione S-transferase theta 1 (GSTT1), mRNA
2968	15583	28064	6.37	1.0E-106	AB037747.1	NT	Homo sapiens glutathione S-transferase theta 1 (GSTT1), mRNA
3214	15626	28303	2.04	1.0E-106	8922965	NT	Homo sapiens mRNA for KIAA1326 protein, partial cds
3214	15626	28304	2.04	1.0E-106	8922965	NT	Homo sapiens mRNA for KIAA1326 protein, partial cds
3420	16028	28509	0.72	1.0E-106	AB008681.1	NT	Homo sapiens hypothetical protein FLJ11273 (FLJ11273), mRNA
3488	16093	28565	1.14	1.0E-106	AB033104.1	NT	Homo sapiens hypothetical protein FLJ11273 (FLJ11273), mRNA
3488	16093	28566	1.14	1.0E-106	AB033104.1	NT	Homo sapiens gene for activin receptor type IIB, complete cds
4111	16705	29158	9.08	1.0E-106	AW974650.1	EST_HUMAN	Homo sapiens mRNA for KIAA1278 protein, partial cds
4111	16705	29159	9.08	1.0E-106	AW974650.1	EST_HUMAN	Homo sapiens mRNA for KIAA1278 protein, partial cds
4706	17288	29732	1.47	1.0E-106	BE144286.1	EST_HUMAN	EST368875 MAGC resequences, MAGN Homo sapiens cDNA
5438	17993	30399	8.5	1.0E-106	S67479.1	NT	EST368875 MAGC resequences, MAGN Homo sapiens cDNA
5572	18203	30653	2.76	1.0E-106	AA781155.1	EST_HUMAN	MRO-HT0165-140200-008-d10 HT0165 Homo sapiens cDNA
6017	18636	31375	0.67	1.0E-106	AU130113.1	EST_HUMAN	(GC*IS)=vitamin D-binding protein/group specific component [human, peripheral blood leukocytes, Genomic, 2126 nt, segment 5 of 9]
6017	18636	31376	0.67	1.0E-106	AU130113.1	EST_HUMAN	2126 nt, segment 5 of 9
6145	18759	31517	0.82	1.0E-106	AU143428.1	EST_HUMAN	2126 nt, segment 5 of 9
6145	18759	31518	0.82	1.0E-106	AU143428.1	EST_HUMAN	2126 nt, segment 5 of 9
6250	18859	31631	13.05	1.0E-106	BF679574.1	EST_HUMAN	2126 nt, segment 5 of 9
6355	18960	31736	0.68	1.0E-106	BE897112.1	EST_HUMAN	2126 nt, segment 5 of 9
6551	19149	31945	19.14	1.0E-106	11545913	NT	2126 nt, segment 5 of 9
6551	19149	31946	19.14	1.0E-106	11545913	NT	2126 nt, segment 5 of 9

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Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7406	19931	32795	5.83	1.0E-106	AA663779.1	EST_HUMAN	aa72607.s1 Stralagene schizo brain S11 Homo sapiens cDNA clone IMAGE:969732 3' similar to gb:X65873
7453	19977	32842	4.92	1.0E-106	11429817	NT	KINESIN HEAVY CHAIN (HUMAN);
7514	20035	32901	1.23	1.0E-106	BE262722.1	EST_HUMAN	Homo sapiens XPMC2 protein (LOC57109). mRNA
7606	20119	32995	8.75	1.0E-106	11425503	NT	601105736F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2986345 5'
7608	20119	32996	8.75	1.0E-106	11425503	NT	Homo sapiens sorting nexin 11 (SNX11). mRNA
7769	20277	33175	0.72	1.0E-106	AW163047.1	EST_HUMAN	Homo sapiens sorting nexin 11 (SNX11). mRNA
7826	20468	33376	5.97	1.0E-106	BE741408.1	EST_HUMAN	au9105.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2783649 5' similar to TR:075834
7926	20468	33377	5.97	1.0E-106	BE741408.1	EST_HUMAN	O75834 CULLIN-4A ;
8115	20656	33565	13.65	1.0E-106	A1523066.1	EST_HUMAN	601594331F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3948463 5'
8564	21103	34022	0.74	1.0E-106	BE387950.1	EST_HUMAN	601594331F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3948463 5'
8564	21103	34023	0.74	1.0E-106	BE387950.1	EST_HUMAN	601594331F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3948463 5'
8640	21179	34099	3.9	1.0E-106	A1654123.1	EST_HUMAN	ar68407.x1 Barstead aorta HPLRB6 Homo sapiens cDNA clone IMAGE:2127732 3' similar to gb:X06233
8645	21184	34103	0.54	1.0E-106	A1991109.1	EST_HUMAN	CALGRANULIN B (HUMAN);
8982	21520	34446	0.56	1.0E-106	AW839831.1	EST_HUMAN	601282777F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3604493 5'
9074	21611	34542	2	1.0E-106	AA825307.1	EST_HUMAN	601282777F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3604493 5'
9074	21611	34543	2	1.0E-106	AA825307.1	EST_HUMAN	601282777F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3604493 5'
9210	21727	34670	2.03	1.0E-106	A1750447.1	EST_HUMAN	ly62a05.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2283632 3' similar to SW:ICAB_HUMAN
9350	21864	34814	1.46	1.0E-106	A179569.1	EST_HUMAN	Q05084.69 KD ISLET CELL AUTOANTIGEN ;
9350	21864	34815	1.46	1.0E-106	A179569.1	EST_HUMAN	wu38c03.x1 Soares_Dieckgrafe_colon_NHCD Homo sapiens cDNA clone IMAGE:2522308 3' similar to
9913	22409	35395	1.35	1.0E-106	BE389234.1	EST_HUMAN	TR:070273 070273 ETS HOMOLOGOUS FACTOR ;
9996	22491	35479	1.47	1.0E-106	BF027310.1	EST_HUMAN	QW4-L T0059-150200-098-e08 LT0059 Homo sapiens cDNA
9996	22491	35480	1.47	1.0E-106	BF027310.1	EST_HUMAN	cc87a08.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1354790 3'
10139	22634	35624	8.16	1.0E-106	AA604417.1	EST_HUMAN	cc87a08.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1354790 3'
10139	22634	35625	8.16	1.0E-106	AA604417.1	EST_HUMAN	np57b10.s1 NCI_CGAP_Br2 Homo sapiens cDNA clone IMAGE:1130395 3'
10185	22680	35672	1.56	1.0E-106	AW363296.1	EST_HUMAN	np57b10.s1 NCI_CGAP_Br2 Homo sapiens cDNA clone IMAGE:1130395 3'
10185	22680	35672	1.56	1.0E-106	AW363296.1	EST_HUMAN	RCO-CT0318-201199-031-at11 CT0318 Homo sapiens cDNA
10190	22685	35677	0.77	1.0E-106	11438432	NT	Homo sapiens multimarin (MMRN). mRNA

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10190	22885	35678	0.77	1.0E-106	11436432	NT	Homo sapiens multimilin (MMRN), mRNA
10358	22852	35846	0.45	1.0E-106	AL039886.1	EST_HUMAN	DKFZp434F0712_r1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434F0712 5'
10472	22966	35976	3.31	1.0E-106	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
10775	23298	36304	6.85	1.0E-106	BF032755.1	EST_HUMAN	801453461F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3857366 5'
10775	23298	36305	6.85	1.0E-106	BF032755.1	EST_HUMAN	801453461F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3857366 5'
10941	23457	36480	2.93	1.0E-106	J05200.1	NT	Human nyanodine receptor mRNA, complete cds
10941	23457	36481	2.93	1.0E-106	J05200.1	NT	Human nyanodine receptor mRNA, complete cds
11288	23739	36795	1.67	1.0E-106	BE257385.1	EST_HUMAN	801109219F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3349997 5'
11418	23869	36929	1.83	1.0E-106	BE010882.1	EST_HUMAN	RC5-BN0192-100500-021-802 BN0192 Homo sapiens cDNA
11418	23869	36930	1.83	1.0E-106	BE010882.1	EST_HUMAN	RC5-BN0192-100500-021-802 BN0192 Homo sapiens cDNA
11762	24867	30896	5.89	1.0E-106	AW410405.1	EST_HUMAN	R05h11.x1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:2861644 5'
11991	24301	30987	4.03	1.0E-106	BE984488.1	EST_HUMAN	801433087F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3918524 5'
11991	24301	30987	4.03	1.0E-106	BE984488.1	EST_HUMAN	801433087F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3918524 5'
12216	24439		3.44	1.0E-106	BE95905.1	EST_HUMAN	RC1-CT0248-090800-024-405 CT0249 Homo sapiens cDNA
255	12815		2.78	1.0E-107	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region: segment 1/2
286	12842		1.25	1.0E-107	X60459.1	NT	Human IFNAR gene for interferon alpha/beta receptor
658	13281	25781	1.82	1.0E-107	AF155103.1	NT	Homo sapiens NY-REN-25 antigen mRNA, partial cds
846	13462	25970	1.45	1.0E-107	X60459.1	NT	Human IFNAR gene for interferon alpha/beta receptor
919	13532	26050	2.27	1.0E-107	X60459.1	NT	Human IFNAR gene for interferon alpha/beta receptor
1004	13615	26129	8.14	1.0E-107	AF154121.1	NT	Homo sapiens sodium-dependent high-affinity dicarboxylate transporter (NADC3) mRNA, complete cds
1321	13915	26437	1.33	1.0E-107	AB032253.1	NT	Homo sapiens BAZ1B mRNA for bromodomain adjacent to zinc finger domain 1B, complete cds
1615	14208	26741	2.81	1.0E-107	BF087405.1	EST_HUMAN	QV2-HT0540-120900-358-405 HT0540 Homo sapiens cDNA
1788	14378	26922	2.7	1.0E-107	AF136275.1	NT	Homo sapiens cathepsin Z precursor (CTSZ) gene, exon 3
1880	14466	27023	0.89	1.0E-107	AB007622.2	NT	Homo sapiens mRNA for KIAA0453 protein, partial cds
1880	14466	27024	0.89	1.0E-107	AB007622.2	NT	Homo sapiens mRNA for KIAA0453 protein, partial cds
2249	14823	27398	1.17	1.0E-107	U13729.1	NT	Human dipeptidyl peptidase IV (CD26) gene, exon 20
2400	14968	27541	0.94	1.0E-107	AW842451.1	EST_HUMAN	PM1-CN0031-190100-001-403 CN0031 Homo sapiens cDNA
2400	14968	27542	0.94	1.0E-107	AW842451.1	EST_HUMAN	PM1-CN0031-190100-001-403 CN0031 Homo sapiens cDNA
2572	15135	27706	5.5	1.0E-107	BE732460.1	EST_HUMAN	801567619F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3842308 5'
2572	15135	27707	5.5	1.0E-107	BE732460.1	EST_HUMAN	801567619F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3842308 5'
3040	15656	28136	3.03	1.0E-107	AW842451.1	EST_HUMAN	PM1-CN0031-190100-001-403 CN0031 Homo sapiens cDNA
3040	15656	28136	3.03	1.0E-107	AW842451.1	EST_HUMAN	PM1-CN0031-190100-001-403 CN0031 Homo sapiens cDNA
3134	15748	28217	3.02	1.0E-107	5902097	NT	Homo sapiens SMT3 (suppressor of mit two 3, yeast) homolog 2 (SMT3H2), mRNA

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3888	16497	28959	4.68	1.0E-107	AF020671.1	NT	Homo sapiens myotubularin (MTM1) gene, exon 9
3972	16570	29039	1.68	1.0E-107	M19816.1	NT	Human apolipoprotein B-100 (apoB) gene, exon 10
3972	16570	29040	1.68	1.0E-107	M19816.1	NT	Human apolipoprotein B-100 (apoB) gene, exon 10
6025	16644	31386	4.74	1.0E-107	BE867469.1	EST_HUMAN	601442558F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3848494.5
7369	16924	32788	1.4	1.0E-107	AW503913.1	EST_HUMAN	UI-HF-BN0-alf-c-08-Q-U1r1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3079310.5
7369	16924	32789	1.4	1.0E-107	AW503913.1	EST_HUMAN	UI-HF-BN0-alf-c-08-Q-U1r1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3079310.5
7536	20066	32830	1.28	1.0E-107	AI765078.1	EST_HUMAN	wh55h04.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2384791.3
8309	21909	34658	0.88	1.0E-107	AU122469.1	EST_HUMAN	AU122469 MAMMA1 Homo sapiens cDNA clone MAMMA1002433.5
10533	23070	36083	2.05	1.0E-107	BE168726.1	EST_HUMAN	QV1-HT0518-140300-107-c10 HT0518 Homo sapiens cDNA
10583	23118	36133	3.35	1.0E-107	AI392850.1	EST_HUMAN	ig104008.x1 NCI_CGAP_GCL11 Homo sapiens cDNA clone IMAGE:2108363.3 similar to SW:AACT_DICD1
10825	23346	36362	2.18	1.0E-107	L49141.1	NT	P05095 ALPHA-ACTININ 3, NON MUSCULAR
10839	23360	36375	2.39	1.0E-107	BF668511.1	EST_HUMAN	Homo sapiens neuroendocrine-specific protein (NSP) gene, exon 4
11203	23708	36760	4.35	1.0E-107	BE540550.1	EST_HUMAN	602123983F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4281038.5
11271	23009	36016	4.67	1.0E-107	11419701	NT	60106668F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3452829.5
11271	23008	36017	4.67	1.0E-107	11419701	NT	Homo sapiens HSPC049 protein (HSPC049), mRNA
11577	24023	37092	3.71	1.0E-107	4507822	NT	Homo sapiens UDP glycosyltransferase 2 family, polypeptide B11 (UGT2B11) mRNA
11830	25014		7.41	1.0E-107	AA001415.1	EST_HUMAN	Homo sapiens UDP glycosyltransferase 2 family, polypeptide B11 (UGT2B11) mRNA
189	12850		1.3	1.0E-108	AA341934.1	EST_HUMAN	z645601.s1 Soares retina N2b4HR Homo sapiens cDNA clone IMAGE:361944.3 similar to contains THR.b1
960	13602	26116	1.84	1.0E-108	BE286042.1	EST_HUMAN	THR repetitive element
1390	13902	26421	4.66	1.0E-108	Y18000.1	NT	EST47393 Fetal muscle Homo sapiens cDNA 5' end
2123	14701	27271	0.95	1.0E-108	BF026726.1	EST_HUMAN	601177016F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3532348.5
2368	14939	27511	1.91	1.0E-108	A1686040.1	EST_HUMAN	Homo sapiens NF2 gene
2368	14939	27512	1.91	1.0E-108	A1686040.1	EST_HUMAN	601671914F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3954939.5
2472	15039	27607	7.53	1.0E-108	BE206694.1	EST_HUMAN	1871e10.x1 NCI_CGAP_P128 Homo sapiens cDNA clone IMAGE:3954939.5
3392	16000	28478	0.73	1.0E-108	AF032897.1	NT	PROTEOGLYCAN II PRECURSOR (HUMAN);
3392	16000	28478	0.73	1.0E-108	AF032897.1	NT	1871e10.x1 NCI_CGAP_P128 Homo sapiens cDNA clone IMAGE:2248938.3 similar to gb:M14219 BONE
4237	16925	29275	1.43	1.0E-108	AW664438.1	EST_HUMAN	PROTEOGLYCAN II PRECURSOR (HUMAN);
							bb25b10.x1 NIH_MGC_14 Homo sapiens cDNA clone IMAGE:2963899.3 similar to gb:X53777 60S
							RIBOSOMAL PROTEIN L23 (HUMAN); gb:J05277 Mouse hexokinase mRNA, complete cds (MOUSE);
							Homo sapiens potassium channel subunit (HERG-3) mRNA, complete cds
							Homo sapiens potassium channel subunit (HERG-3) mRNA, complete cds
							h12a11.x1 NCI_CGAP_GU1 Homo sapiens cDNA clone IMAGE:2972060.3 similar to SW:3BP1_MOUSE
							P55194 SH3-BINDING PROTEIN 3BP-1

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4624	17207	29656	1.92	1.0E-108	U72861.1	NT	Human hepatocyte nuclear factor 4-alpha gene, exon 2
4624	17207	29657	1.92	1.0E-108	U72861.1	NT	Human hepatocyte nuclear factor 4-alpha gene, exon 2
4926	17501	29849	2.66	1.0E-108	7661879	NT	Homo sapiens KIAA0187 gene product (KIAA0187), mRNA
5044	17617	30062	0.93	1.0E-108	AW504799.1	EST_HUMAN	UI-HF-BN0-ah-e-04-0-UI.r1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3080166 5'
5084	17657	30098	2.16	1.0E-108	AJ008005.1	NT	Homo sapiens PSN1 gene, alternative transcript
5318	17880	30289	0.81	1.0E-108	5031624	NT	Homo sapiens CCAAT-box-binding transcription factor (CBF2) mRNA
5670	18287	30777	1.2	1.0E-108	AW384094.1	EST_HUMAN	RCO-HT0372-241199-031-d03 HT0372 Homo sapiens cDNA
5718	18344	30851	2.96	1.0E-108	BE669016.1	EST_HUMAN	601444922F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3848980 5'
5718	18344	30852	2.96	1.0E-108	BE669016.1	EST_HUMAN	601444922F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3848980 5'
6084	18701		0.83	1.0E-108	AF012623.1	NT	Homo sapiens familial mental retardation protein 2 (FMR2) gene, exon 20
6153	18766	31529	0.88	1.0E-108	BF334851.1	EST_HUMAN	PM4-CT0403-240700-001-c10 CT0403 Homo sapiens cDNA
6288	18896	31666	5.83	1.0E-108	AF264717.1	NT	Homo sapiens FYVE domain-containing dual specificity protein phosphatase FYVE-DSP2 mRNA, complete cds
6288	18896	31667	5.83	1.0E-108	AF264717.1	NT	Homo sapiens FYVE domain-containing dual specificity protein phosphatase FYVE-DSP2 mRNA, complete cds
6409	19012	31795	1.16	1.0E-108	AJ133289.1	NT	Homo sapiens cavedin-1/-2 locus, Contig1, D7S522, genes CAV2 (exons 1, 2a and 2b), CAV1 (exons 1 and 2)
6499	18766	31529	1.01	1.0E-108	BF334851.1	EST_HUMAN	PM4-CT0403-240700-001-c10 CT0403 Homo sapiens cDNA
6732	19326	32130	0.95	1.0E-108	AF016708.1	NT	Homo sapiens E6-AP ubiquitin-protein ligase (UBE3A) gene, exon 4
6732	19326	32131	0.85	1.0E-108	AF016708.1	NT	Homo sapiens E6-AP ubiquitin-protein ligase (UBE3A) gene, exon 4
7211	19742	32596	5.04	1.0E-108	11431857	NT	Homo sapiens G protein-coupled receptor, family C, group 5, member B (GPRC5B), mRNA
7465	19887	32852	3.44	1.0E-108	4758333	NT	Homo sapiens delta-6 fatty acid desaturase (FADS6) mRNA
7492	20015	32881	1.67	1.0E-108	BE252607.1	EST_HUMAN	601113471F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3354064 5'
7516	20036	32903	1.06	1.0E-108	BF528912.1	EST_HUMAN	602043394F1 NCI_CGAP_Bn67 Homo sapiens cDNA clone IMAGE:4181037 5'
7516	20036	32904	1.06	1.0E-108	BF528912.1	EST_HUMAN	602043394F1 NCI_CGAP_Bn67 Homo sapiens cDNA clone IMAGE:4181037 5'
8008	20550		1.77	1.0E-108	AF063500.1	NT	Homo sapiens connective tissue growth factor-like protein precursor, mRNA, complete cds
8058	20800	33509	1.47	1.0E-108	AW408694.1	EST_HUMAN	UI-HF-BN0-ads-e-12-0-UI.r1 NIH_MGC_38 Homo sapiens cDNA clone IMAGE:3082878 5'
8058	20800	33510	1.47	1.0E-108	AW408694.1	EST_HUMAN	UI-HF-BN0-ads-e-12-0-UI.r1 NIH_MGC_38 Homo sapiens cDNA clone IMAGE:3082878 5'
8977	21515	34439	1.08	1.0E-108	AF203977.1	NT	Homo sapiens ETS-family transcription factor EHF (EHF) mRNA, complete cds
9015	21552	34480	0.52	1.0E-108	N44974.1	EST_HUMAN	yy35h10.1 Soares melanocyte 2NbrHM Homo sapiens cDNA clone IMAGE:273283 5' similar to PIR-A45773 A45773 kelch protein, long form - fruit fly;
10501	22965	36004	0.48	1.0E-108	11428155	NT	Homo sapiens similar to high-mobility group (nonhistone chromosomal) protein 4 (H. sapiens) (LOC63446), mRNA
10547	20279	33178	1.87	1.0E-108	BE555227.1	EST_HUMAN	601058769F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3445361 5'

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10707	18037	30497	2.08	1.0E-108	Y12490.1	NT	Homo sapiens mRNA for Golgi-associated microtubule-binding protein (GMAP-210)
11151	23659	36703	4.23	1.0E-108	AW966185.1	EST_HUMAN	EST378258 MAGE resequences, MAGI Homo sapiens cDNA
11204	23709	36761	1.81	1.0E-108	AV708790.1	EST_HUMAN	AV708790 ADC Homo sapiens cDNA clone ADCAEE03 5'
11204	23709	36762	1.81	1.0E-108	AV708790.1	EST_HUMAN	AV708790 ADC Homo sapiens cDNA clone ADCAEE03 5'
11249	23779		2.91	1.0E-108	11441465	NT	Homo sapiens G protein-coupled receptor 48 (GPR48), mRNA
11305	23798	36857	1.72	1.0E-108	D63539.1	NT	Homo sapiens COL4A6 gene for $\alpha 1(V)$ collagen, exon 23
12005	24308	30991	5.17	1.0E-108	AK024447.1	NT	Homo sapiens mRNA for FLJ00037 protein, partial cds
12414	24587		7.58	1.0E-108	BF346356.1	EST_HUMAN	802018571F1 NCI_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4154297 5'
46	12725	25186	2.13	1.0E-109	AW803118.1	EST_HUMAN	IL2-UM0077-260400-079-D06 UM0077 Homo sapiens cDNA
69	12747	25225	3.04	1.0E-109	D86974.1	NT	Human mRNA for KIAA0220 gene, partial cds
235	12895	25376	4.41	1.0E-109	11422486	NT	Homo sapiens hypothetical protein FLJ11318 (FLJ11318), mRNA
246	12905	25386	2.89	1.0E-109	11438391	NT	Homo sapiens reticulocalbin 1, EF-hand calcium binding domain (RCN1), mRNA
492	13125	25610	4.89	1.0E-109	4507712	NT	Homo sapiens tetrapeptide repeat domain 2 (TTC2), mRNA
624	13251	25725	19.67	1.0E-109	AB023216.1	NT	Homo sapiens mRNA for KIAA0999 protein, partial cds
624	13251	25726	19.67	1.0E-109	AB023216.1	NT	Homo sapiens mRNA for KIAA0999 protein, partial cds
1050	13657	26168	0.72	1.0E-109	AL163249.2	NT	Homo sapiens chromosome 21 segment HS21C049
1244	13842	26359	24.19	1.0E-109	M28699.1	NT	Homo sapiens nucleolar phosphoprotein B23 (NPM1) mRNA, complete cds
1245	13842	26359	15.92	1.0E-109	M28699.1	NT	Homo sapiens nucleolar phosphoprotein B23 (NPM1) mRNA, complete cds
1589	14182	26714	0.98	1.0E-109	BE293673.1	EST_HUMAN	801186922F2 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2959636 5'
1589	14182	26715	0.98	1.0E-109	BE293673.1	EST_HUMAN	801186922F2 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2959636 5'
1915	14500	27055	3.28	1.0E-109	D13843.2	NT	Homo sapiens mRNA for KIAA0018 protein, partial cds
2283	14857	27434	1.19	1.0E-109	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
2292	14866	27441	2.08	1.0E-109	Y17123.1	NT	Homo sapiens SNF5/INI1 gene, exon 6
2652	15211	27783	2.86	1.0E-109	AI023238.1	EST_HUMAN	aw95a01.x1 Soares_fetal_liver_spleen_INFLS_S1 Homo sapiens cDNA clone IMAGE:1654538 3' similar to TR:002197 002197 CIRCULATING CATHODIC ANTIGEN. ;
2652	15211	27784	2.86	1.0E-109	AI023238.1	EST_HUMAN	aw95a01.x1 Soares_fetal_liver_spleen_INFLS_S1 Homo sapiens cDNA clone IMAGE:1654538 3' similar to TR:002197 002197 CIRCULATING CATHODIC ANTIGEN. ;
2653	15212	27785	2.01	1.0E-109	4504208	NT	Homo sapiens guanylate cyclase activator 1A (retina) (GUCA1A) mRNA
3094	15709	28180	1.68	1.0E-109	N85190.1	EST_HUMAN	J2816F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA clone J2816 5' similar to ZINC FINGER PROTEIN ZNF43
3435	16043	28524	1.34	1.0E-109	AW893192.1	EST_HUMAN	CM3-NN0009-190400-150-f10 NN0009 Homo sapiens cDNA
3435	16043	28525	1.34	1.0E-109	AW893192.1	EST_HUMAN	CM3-NN0009-190400-150-f10 NN0009 Homo sapiens cDNA
3569	16173	28655	0.9	1.0E-109	AF240698.1	NT	Homo sapiens retinol dehydrogenase homolog isoform-1 (RDH) mRNA, complete cds
3809	16508		0.83	1.0E-109	BE146144.1	EST_HUMAN	MRO-HT0209-110400-108-a04 HT0209 Homo sapiens cDNA

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Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4228	18816	29264	4.43	1.0E-109	AI655417.1	EST_HUMAN	ts98008.x1 NCL_CGAP_GC6 Homo sapiens cDNA clone IMAGE:2289330 3' similar to WP.F53A2.8
4493	17078	29528	2.7	1.0E-109	4504208	NT	CE16100;
4705	17287	29731	1.18	1.0E-109	7662083	NT	Homo sapiens guanylate cyclase activator 1A (retina) (GUCA1A) mRNA
5051	17624	30069	1.14	1.0E-109	R15400.1	EST_HUMAN	Homo sapiens KIAA0377 gene product (KIAA0377), mRNA
5465	18100	30418	0.78	1.0E-109	BF673718.1	EST_HUMAN	ya48a08.r1 Soares Infant brain 1NIB Homo sapiens cDNA clone IMAGE:53057 5'
5516	18148	30560	2.6	1.0E-109	5174622	NT	602136446F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4272622 5'
5792	18417		1.24	1.0E-109	BE179356.1	EST_HUMAN	Homo sapiens placental protein 11 (serine proteinase) (P11) mRNA
6085	24756	31448	1.02	1.0E-109	BF379688.1	EST_HUMAN	RC1-HT0615-200400-022-d04 HT0615 Homo sapiens cDNA
6147	18417		1.3	1.0E-109	BE179356.1	EST_HUMAN	CM1-UT0038-060900-398-h07 UT0038 Homo sapiens cDNA
6491	19092	31875	0.8	1.0E-109	M23442.1	NT	RC1-HT0615-200400-022-d04 HT0615 Homo sapiens cDNA
6491	19092	31876	0.8	1.0E-109	M23442.1	NT	Human interleukin 4 (IL-4) gene, complete cds
7289	19817	32676	0.95	1.0E-109	AB046811.1	NT	Human interleukin 4 (IL-4) gene, complete cds
7568	20083	32959	4.08	1.0E-109	11432574	NT	Homo sapiens mRNA for KIAA1591 protein, partial cds
7568	20085	32961	5.94	1.0E-109	BF182707.1	EST_HUMAN	Homo sapiens A.T-binding transcription factor 1 (ATBF1), mRNA
7568	20085	32962	5.94	1.0E-109	BF182707.1	EST_HUMAN	601809495F1 NIH_MGC_18 Homo sapiens cDNA clone IMAGE:4040279 5'
8114	20655	33564	1.17	1.0E-109	AL049784.1	EST_HUMAN	601809495F1 NIH_MGC_18 Homo sapiens cDNA clone IMAGE:4040279 5'
8227	20768	33687	1.27	1.0E-109	AW749130.1	EST_HUMAN	Novel human gene mapping to chromosome 13
8591	21130		2.65	1.0E-109	AA077498.1	EST_HUMAN	PMD-BT0340-091299-002-e05 BT0340 Homo sapiens cDNA
8669	21208	34125	14.1	1.0E-109	BE787540.1	EST_HUMAN	7B18H01 Chromosome 7 Fetal Brain cDNA Library Homo sapiens cDNA clone 7B18H01
8669	21208	34126	14.1	1.0E-109	BE787540.1	EST_HUMAN	601478417F1 NIH_MGC_88 Homo sapiens cDNA clone IMAGE:3882124 5'
8908	21446	34368	0.57	1.0E-109	BE145672.1	EST_HUMAN	601478417F1 NIH_MGC_88 Homo sapiens cDNA clone IMAGE:3882124 5'
							IL0-HT0205-071199-142-g01 HT0205 Homo sapiens cDNA
9163	21698	34642	1.82	1.0E-109	HB4860.1	EST_HUMAN	ye90g08.r1 Soares retina N2b5HR Homo sapiens cDNA clone IMAGE:222110 5' similar to SP.A53491
9272	21798	34747	0.54	1.0E-109	BE397068.1	EST_HUMAN	A53491 BUMETANIDE-SENSITIVE NA-K-Cl COTRANSPORTER - SPIN1
9272	21798	34748	0.54	1.0E-109	BE397068.1	EST_HUMAN	601289760F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3620030 5'
9405	21914	34863	3.55	1.0E-109	F06804.1	EST_HUMAN	601289760F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3620030 5'
10653	23185	36200	2.73	1.0E-109	BE540908.1	EST_HUMAN	HSC1EC121 normalized Infant brain cDNA Homo sapiens cDNA clone c-1ec12
10653	23185	36201	2.73	1.0E-109	BE540908.1	EST_HUMAN	601063030F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3448588 5'
10687	23217	36229	35.59	1.0E-109	BF694831.1	EST_HUMAN	601063030F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3448588 5'
10847	23368	36386	2	1.0E-109	7662279	NT	602060724F2 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4245341 5'
10847	23368	36387	2	1.0E-109	7662279	NT	Homo sapiens KIAA0744 gene product: histone deacetylase 7 (KIAA0744), mRNA
11004	23518	36553	1.95	1.0E-109	AU121370.1	EST_HUMAN	Homo sapiens KIAA0744 gene product: histone deacetylase 7 (KIAA0744), mRNA
11248	23778	36835	2.84	1.0E-109	4502838	NT	AU121370 HEMBB1 Homo sapiens cDNA clone HEMBB1002690 5'
							Homo sapiens Chediak-Higashi syndrome 1 (CHS1) mRNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11285	23738	38794	6.81	1.0E-109	W16510.1	EST_HUMAN	zb08b12.1 Soares fetal_lung_NbHL19W Homo sapiens cDNA clone IMAGE:301439 5' similar to PIR:S43869 S43869 p54-beta stress-activated protein kinases - rat;
12131	14866	27441	1.6	1.0E-109	Y17123.1	NT	Homo sapiens SNF5/INI1 gene, exon 6
12252	24463	30981	15.45	1.0E-109	AB011398.1	NT	Homo sapiens gene for AF-6, complete cds
3	12683	25139	1.19	1.0E-110	7549804	NT	Homo sapiens gene for AF-6, transcript variant 2, mRNA
40	12719	25179	4.61	1.0E-110	5803073	NT	Homo sapiens deiodinase, iodothyronine, type II (DIO2), transcript variant 2, mRNA
40	12719	25180	4.61	1.0E-110	5803073	NT	Homo sapiens leucine-zipper-like transcriptional regulator, 1 (LZTR1), mRNA
114	12683	25139	0.83	1.0E-110	7549804	NT	Homo sapiens leucine-zipper-like transcriptional regulator, 1 (LZTR1), mRNA
318	12970	25459	1	1.0E-110	D87291.1	NT	Homo sapiens deiodinase, iodothyronine, type II (DIO2), transcript variant 2, mRNA
553	13184	25662	0.93	1.0E-110	U84550.1	NT	Human mRNA for inward rectifier potassium channel, complete cds
1222	13622	26337	0.97	1.0E-110	5031820	NT	Human dystrobrevin (DTN) gene, exon 20
1322	13916	26438	1.28	1.0E-110	AB032253.1	NT	Homo sapiens calcitonin receptor-like (CALORL) mRNA
1965	14549	27105	1.48	1.0E-110	BE379477.1	EST_HUMAN	Homo sapiens BAZ1B mRNA for bromodomain adjacent to zinc finger domain 1B, complete cds
2103	14882		1.65	1.0E-110	BF508896.1	EST_HUMAN	601237545F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3009883 5'
2668	15484		0.95	1.0E-110	4503098	NT	U1-H-B14-ss-b-0-Q-U1.s1 NCI_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3085784 3'
3065	13918	26438	0.85	1.0E-110	AB032253.1	NT	Homo sapiens chondroitin sulfate proteoglycan 4 (melanome-associated) (CSPG4), mRNA
							Homo sapiens BAZ1B mRNA for bromodomain adjacent to zinc finger domain 1B, complete cds
							Homo sapiens Bruton's tyrosine kinase (BTK), alpha-D-galactosidase A (GLA), L44-like ribosomal protein (L44L) and FTP3 (FTP3) genes, complete cds
3123	15737		1.2	1.0E-110	U78027.1	NT	Homo sapiens pregnancy-zone protein (PZP), mRNA
3228	15940	28319	6.37	1.0E-110	11436041	NT	Homo sapiens pregnancy-zone protein (PZP), mRNA
3228	15940	28320	6.37	1.0E-110	11436041	NT	Homo sapiens pregnancy-zone protein (PZP), mRNA
							Homo sapiens pregnancy-zone protein (PZP), mRNA
4128	16720	29175	0.92	1.0E-110	BE018556.1	EST_HUMAN	601237545F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3048848 5' similar to TR:060312 O60312
4281	16867	29314	1.08	1.0E-110	M15918.1	NT	KIAA0568 PROTEIN
							Human autoimmune antigen small nuclear ribonucleoprotein E pseudogene
							ou32b10.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1627863 3' similar to SW:N121_RAT_P5291 NUCLEAR ENVELOPE PORE MEMBRANE PROTEIN POM 121
4740	17321	29761	2.32	1.0E-110	A017213.1	EST_HUMAN	AU117812 HEMBA1 Homo sapiens cDNA clone HEMBA1002241 5'
4758	17338	29785	3.28	1.0E-110	AU117812.1	EST_HUMAN	Homo sapiens KIAA1002 protein (KIAA1002), mRNA
5109	17681		1.8	1.0E-110	7662441	NT	601118710F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3028538 5'
5498	18132	30540	2.18	1.0E-110	BE299406.1	EST_HUMAN	601493877F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3885795 5'
5900	18522	31247	0.7	1.0E-110	BE021069.1	EST_HUMAN	Homo sapiens hypothetical protein FLJ10300 (FLJ10300), mRNA
5917	18539	31264	6.81	1.0E-110	11419323	NT	Homo sapiens hypothetical protein FLJ10300 (FLJ10300), mRNA
5917	18539	31265	6.81	1.0E-110	11419323	NT	Homo sapiens hypothetical protein FLJ10300 (FLJ10300), mRNA
6818	24771	32226	3.2	1.0E-110	M55112.1	NT	Human cystic fibrosis transmembrane conductance regulator (CFTR) gene, exon 7
7159	19891	32536	0.83	1.0E-110	U08888.1	NT	Human GS2 gene, exon 2
7159	19891	32537	0.83	1.0E-110	U08888.1	NT	Human GS2 gene, exon 2

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7364	18890	32753	0.74	1.0E-110	AI560289.1	EST_HUMAN	In12d08.x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2167407 3' similar to SW.ETV1_HUMAN
7454	19878	32843	11.26	1.0E-110	AV714276.1	EST_HUMAN	P50549 ETS TRANSLOCATION VARIANT 1 ;
7454	19878	32844	11.26	1.0E-110	AV714276.1	EST_HUMAN	AV714276 DGB Homo sapiens cDNA clone DGBCGE01 5'
7478	20000	32865	2.84	1.0E-110	AB020675.1	NT	AV714276 DGB Homo sapiens cDNA clone DGBCGE01 5'
7571	20088	32864	1.06	1.0E-110	AU137923.1	EST_HUMAN	Homo sapiens mRNA for KIAA0868 protein, partial cds
9258	21784	34737	0.54	1.0E-110	BE302594.1	EST_HUMAN	AU137923 PLACE1 Homo sapiens cDNA clone PLACE1007511 5'
9497	21997	34953	2.91	1.0E-110	AW838394.1	EST_HUMAN	bae8801.y1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:2905561 5' similar to TR:O77253 O77258
10226	22721	35712	3.91	1.0E-110	11432732	NT	EG:114D9.2 PROTEIN ;
10626	23158	36171	3.89	1.0E-110	Y12337.1	NT	Homo sapiens galactokinase 2 (GALK2), mRNA
10946	23367	36384	3.87	1.0E-110	BE734357.1	EST_HUMAN	H.sapiens mRNA for myotonic dystrophy protein kinase like protein
10946	23367	36385	3.87	1.0E-110	BE734357.1	EST_HUMAN	601565604F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3840433 5'
11317	23015	36024	3.28	1.0E-110	AA446529.1	EST_HUMAN	601565604F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3840433 5'
11719	24128		2.86	1.0E-110	BE897218.1	EST_HUMAN	zve67g02.r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:781298 5' similar to TR:G1145816
11849	24209		11.86	1.0E-110	AW062256.1	EST_HUMAN	G1145816 FKBP54 ;
12092	24360		2.73	1.0E-110	AB011399.1	NT	IL0-BT0163-040899-094-p10 BT0163 Homo sapiens cDNA clone IMAGE:3924548 5'
12239	25027		8.39	1.0E-110	BF364546.1	EST_HUMAN	601439784F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3924548 5'
12537	14682		1.43	1.0E-110	BF508896.1	EST_HUMAN	Homo sapiens gene for AF-6, complete cds
186	12847		28.49	1.0E-111	U43701.1	NT	PM3-NN1082-140900-006-112 NN1082 Homo sapiens cDNA
210	12871	25357	0.94	1.0E-111	4758807	NT	UIH-BI4-aos-b-05-0-U1.s1 NCI_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3085784 3'
764	13383		1.64	1.0E-111	BF035327.1	EST_HUMAN	Human ribosomal protein L23a mRNA, complete cds
773	13392	25892	5.46	1.0E-111	8393092	NT	Homo sapiens ras GTPase activating protein-like (NGAP) mRNA
962	13573	26089	2.34	1.0E-111	M25142.1	NT	601458531F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3862086 5'
1870	14263	28797	2.34	1.0E-111		NT	Homo sapiens cat eye syndrome critical region gene 1 (OECRT1), mRNA
4250	16838	29289	1.25	1.0E-111	K02268.1	NT	Human cardiac alpha-myosin heavy chain (MYH6) gene, exons 32 to 34
4423	17008	29451	4.84	1.0E-111	K02268.1	NT	Homo sapiens KIAA0555 gene product (KIAA0555), mRNA
5814	18438	31160	0.91	1.0E-111	BE867809.1	EST_HUMAN	Homo sapiens DKFZP434D156 protein (DKFZP434D156), mRNA
6183	18793	31562	1.58	1.0E-111	AI344679.1	EST_HUMAN	Human erkephalin B (enkb) gene, exon 4 and 3' flank and complete cds
8781	19372	32188	1	1.0E-111	AL040762.1	EST_HUMAN	601443600F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3847655 5'
8898	19632	32470	1.3	1.0E-111	AW294848.1	EST_HUMAN	qp08g12.x1 NCI_CGAP_Kid5 Homo sapiens cDNA clone IMAGE:1917574 3' similar to gb:M29893 RAS-
7471	19893	32856	2.68	1.0E-111	BF366228.1	EST_HUMAN	RELATED PROTEIN RAL-A (HUMAN);
							DKFZp434c1815.r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434c1815 5'
							UIH-BW0-ail-d-03-0-U1.s1 NCI_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:2729525 3'
							IL2-NT0101-280700-114-E03 NT0101 Homo sapiens cDNA

Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7540	20060	32934	3.47	1.0E-111	A1761228.1	EST_HUMAN	w168d01.x1 NCL CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2388465 3' similar to gb:J04813 CYTOCHROME P450 IIIA5 (HUMAN);
7610	20123	33000	1.1	1.0E-111	U80017.1	NT	Homo sapiens basic transcription factor 2 p44 (btf2p44) gene, partial cds, neuronal apoptosis inhibitory protein (hai1) and survival motor neuron protein (smn) genes, complete cds
8038	20580	33488	0.77	1.0E-111	AA278868.1	EST_HUMAN	zs79g03.r1 NCL CGAP_GCB1 Homo sapiens cDNA clone IMAGE:703732 5' similar to TR:G1256410 G1256410 11-ZINC-FINGER TRANSCRIPTION FACTOR. ;
8038	20580	33487	0.77	1.0E-111	AA278868.1	EST_HUMAN	zs79g03.r1 NCL CGAP_GCB1 Homo sapiens cDNA clone IMAGE:703732 5' similar to TR:G1256410 G1256410 11-ZINC-FINGER TRANSCRIPTION FACTOR. ;
8128	20870	33580	0.89	1.0E-111	11431896	NT	Homo sapiens protein x.0001 (LOC51185), mRNA
8183	20724	33638	5.9	1.0E-111	U66533.1	NT	Human beta4-integrin (ITGB4) gene, exon 13
8613	21152	34068	0.82	1.0E-111	11420516	NT	Homo sapiens nuclear factor of activated T-cells, cytoplasmic 2 (NFATC2), mRNA
8710	21249	34172	0.89	1.0E-111	AK024453.1	NT	Homo sapiens mRNA for FLJ00045 protein, partial cds
8743	21282	34280	23.24	1.0E-111	BF214902.1	EST_HUMAN	601847132F1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:4078303 5'
8817	21356	34281	12.59	1.0E-111	X17033.1	NT	Human mRNA for Integrin alpha-2 subunit
9017	21554	34482	3.03	1.0E-111	AF091395.1	NT	Human mRNA for Integrin alpha-2 subunit
9241	21787	34716	0.58	1.0E-111	BF333210.1	EST_HUMAN	Human mRNA for Integrin alpha-2 subunit
10058	22551	35546	2.03	1.0E-111	AA504160.1	EST_HUMAN	Homo sapiens Trio isoform mRNA, complete cds
10082	22577		1.53	1.0E-111	D10083.1	NT	QV2-BT0817-270900-398-e08 BT0817 Homo sapiens cDNA
10173	22688	35663	5.78	1.0E-111	AA131248.1	EST_HUMAN	ee58g02.s1 NCL CGAP_GCB1 Homo sapiens cDNA clone IMAGE:825170 3' similar to gb:L09235 VACUOLAR ATP SYNTHASE CATALYTIC SUBUNIT A, UBIQUITOUS (HUMAN);
10822	23441	36462	4.93	1.0E-111	U68159.1	NT	Homo sapiens RGH1 gene, retrovirus-like element
11674	24083	37146	4.3	1.0E-111	11417801	NT	Human thrombopoietin receptor (MPL) gene, exons 1,2,3,4,5 and 6
12234	24450	30954	2.23	1.0E-111	AV708482.1	EST_HUMAN	Homo sapiens meningioma (disrupted in balanced translocation) 1 (MN1), mRNA
12360	24916	30791	6.35	1.0E-111	W22562.1	EST_HUMAN	AV708482 ADC Homo sapiens cDNA clone ADCAOB08 5'
12507	18039	30498	1.31	1.0E-111	AB035356.1	NT	72C9 Human retina cDNA Tap5091-cleaved sublibrary Homo sapiens cDNA not directional
636	13259	25734	1.69	1.0E-112	4501854	NT	Homo sapiens mRNA for neuradin I-alpha protein, complete cds
638	13261	25736	5.94	1.0E-112	U29103.1	NT	Homo sapiens acetyl-Coenzyme A carboxylase beta (ACACB), mRNA
638	13261	25737	5.94	1.0E-112	U29103.1	NT	Human steroidogenic acute regulatory protein (STAR) gene, exon 5
660	13283	25763	1.42	1.0E-112	BF509039.1	EST_HUMAN	Human steroidogenic acute regulatory protein (STAR) gene, exon 5
660	13283	25764	1.42	1.0E-112	BF509039.1	EST_HUMAN	U1-H-B14-ect-g-04-0-U1.s1 NCL CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3086023 3'
1039	13649	26161	3.88	1.0E-112	AF157623.1	NT	U1-H-B14-ect-g-04-0-U1.s1 NCL CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3086023 3'
1100	13705	26213	2	1.0E-112	P52742	SWISSPROT	Homo sapiens HTRA serine protease (PRSS11) gene, complete cds
1722	14313	26853	4.44	1.0E-112	7662125	NT	ZINC FINGER PROTEIN 135
							Homo sapiens KIAA0440 protein (KIAA0440), mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1722	14313	26854	4.44	1.0E-112	7662125	NT	Homo sapiens KIAA0440 protein (KIAA0440), mRNA
1856	14444	27000	1.56	1.0E-112	AF248540.1	NT	Homo sapiens intercalin 2 (SH3D1B) mRNA, complete cds
2550	15114	27684	1.81	1.0E-112	BE968959.1	EST_HUMAN	601442674F1 NIH_MGC 65 Homo sapiens cDNA clone IMAGE:3848858 5'
3114	15729		0.59	1.0E-112	4504116	EST	Homo sapiens glutamate receptor, ionotropic, kainate 1 (GRIK1) mRNA
3953	16551	29020	0.74	1.0E-112	BE076073.1	EST_HUMAN	MR2-B T0590-090300-113-f09 BT0590 Homo sapiens cDNA
4709	17291	29735	0.65	1.0E-112	4504116	NT	Homo sapiens glutamate receptor, ionotropic, kainate 1 (GRIK1) mRNA
4864	17441	29891	5.1	1.0E-112	AB037832.1	NT	Homo sapiens mRNA for KIAA1411 protein, partial cds
4864	17441	29892	5.1	1.0E-112	AB037832.1	NT	Homo sapiens mRNA for KIAA1411 protein, partial cds
5848	18472	31198	38.42	1.0E-112	N48046.1	EST_HUMAN	y35607.1 Soares melanocyte 2NblHM Homo sapiens cDNA clone IMAGE:273229 5'
6227	18836	31609	1.36	1.0E-112	AF149773.1	NT	Homo sapiens NOD1 protein (NOD1), gene, exons 1, 2, and 3
6294	18902	31672	0.85	1.0E-112	AW502437.1	EST_HUMAN	UI-HF-BR0p-als-g-08-0-UJr1 NIH_MGC_52 Homo sapiens cDNA clone IMAGE:3075658 5'
6294	18902	31673	0.85	1.0E-112	AW502437.1	EST_HUMAN	UI-HF-BR0p-als-g-08-0-UJr1 NIH_MGC_52 Homo sapiens cDNA clone IMAGE:3075658 5'
6397	19000	31778	1.2	1.0E-112	BE741866.1	EST_HUMAN	60159477F1 NIH_MGC 9 Homo sapiens cDNA clone IMAGE:3948557 5'
6747	19340	32146	0.68	1.0E-112	BE273103.1	EST_HUMAN	601142755F1 NIH_MGC_14 Homo sapiens cDNA clone IMAGE:3506508 5'
6747	19340	32147	0.68	1.0E-112	BE273103.1	EST_HUMAN	601142755F1 NIH_MGC_14 Homo sapiens cDNA clone IMAGE:3506508 5'
6928	19587	32416	1.36	1.0E-112	BF574235.1	EST_HUMAN	602131405F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4270921 5'
7375	19901	32764	1.57	1.0E-112	11416777	NT	Homo sapiens solute carrier family 6 (neurotransmitter transporter, L-proline), member 7 (SLC6A7), mRNA
7375	19901	32765	1.57	1.0E-112	11416777	NT	Homo sapiens solute carrier family 6 (neurotransmitter transporter, L-proline), member 7 (SLC6A7), mRNA
8134	20875	33587	1.93	1.0E-112	AU118051.1	EST_HUMAN	AUT18051 HEMBA1 Homo sapiens cDNA clone HEMBA1002773 5'
8887	21425	34350	2.49	1.0E-112	BE867635.1	EST_HUMAN	601443151F1 NIH_MGC 65 Homo sapiens cDNA clone IMAGE:3847285 5'
8887	21425	34351	2.49	1.0E-112	BE867635.1	EST_HUMAN	601443151F1 NIH_MGC 65 Homo sapiens cDNA clone IMAGE:3847285 5'
9807	22305	35289	2.06	1.0E-112	BF111413.1	EST_HUMAN	730g07.x1 Soares NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3523020 3' similar to
10657	23189	36205	3.51	1.0E-112	AW863327.1	EST_HUMAN	TR:Q9VW35 Q9VW35 CG8743 PROTEIN.
10743	23267	36283	1.85	1.0E-112	T93967.1	EST_HUMAN	MR3-SN0009-100400-106-b12 SN0009 Homo sapiens cDNA
10743	23267	36284	1.85	1.0E-112	T93967.1	EST_HUMAN	yf56d10.s1 Soares fetal liver spleen TNFLS Homo sapiens cDNA clone IMAGE:112243 3' similar to
10827	23348	36364	4.28	1.0E-112	AJ249900.1	NT	SP:C40H1.1 CE00109 OVARIAN PROTEIN
10976	23491	36521	1.76	1.0E-112	BE280479.1	EST_HUMAN	Homo sapiens mRNA for secreted modular calcium-binding protein (smoc1 gene)
11051	23564	36599	2.08	1.0E-112	AJ904584.1	EST_HUMAN	601155323F1 NIH_MGC 21 Homo sapiens cDNA clone IMAGE:3138989 5'
11052	23574	36611	4.71	1.0E-112	AW377670.1	EST_HUMAN	IL-BT061-311298-009 BT061 Homo sapiens cDNA
							PMO-CT0237-141099-001-h02 CT0237 Homo sapiens cDNA

Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
772	13391	25890	5.13	1.0E-113	AJ365586.1	EST_HUMAN	ac9501.x1 Schiller meningioma Homo sapiens cDNA clone IMAGE:1953625 3'
772	13391	25891	5.13	1.0E-113	AJ365586.1	EST_HUMAN	ac9501.x1 Schiller meningioma Homo sapiens cDNA clone IMAGE:1953625 3'
878	13580	28105	6.33	1.0E-113	M11965.1	NT	Human X-linked phosphoglycerate kinase gene, exon 8
1588	14181	26713	2.48	1.0E-113	AJ365586.1	EST_HUMAN	ac9501.x1 Schiller meningioma Homo sapiens cDNA clone IMAGE:1953625 3'
1883	15395	27126	0.92	1.0E-113	AF240775.1	NT	Homo sapiens eIF4E-transporter mRNA, complete cds
2142	14720	27291	1.02	1.0E-113	BF515218.1	EST_HUMAN	UI-H-BW1-ant-F03-Q-UI.s1 NCL CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3082876 3'
3184	15778	28249	2.06	1.0E-113	AJ223948.1	NT	Homo sapiens mRNA for putative RNA helicase, 3' end
5454	24852		3.07	1.0E-113	BE780858.1	EST_HUMAN	601469465F1 NIH_MGC_87 Homo sapiens cDNA clone IMAGE:3872536 5'
5884	18311	30808	6	1.0E-113	AU127214.1	EST_HUMAN	AU127214 NT2RP2 Homo sapiens cDNA clone NT2RP2000807 5'
6080	18697	31444	3.89	1.0E-113	AU140291.1	EST_HUMAN	AU140281 PLACE2 Homo sapiens cDNA clone PLACE2000274 5'
8108	18722	31475	1	1.0E-113	AF018535.1	NT	Homo sapiens P-glycoprotein (mdr1) mRNA, complete cds
8220	18830	31804	2.43	1.0E-113		NT	Homo sapiens UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase 8 (GalNAc-T8) (GALNT8), mRNA
8304	18911	31894	0.88	1.0E-113		NT	Homo sapiens ATP-binding cassette, sub-family B (MDR/TAP), member 4 (ABCB4), transcript variant B, mRNA
8304	18911	31895	0.88	1.0E-113		NT	Homo sapiens ATP-binding cassette, sub-family B (MDR/TAP), member 4 (ABCB4), transcript variant B, mRNA
8458	19059	31844	0.71	1.0E-113		NT	Homo sapiens glutamate receptor, ionotropic, N-methyl D-aspartate 2A (GRIN2A) mRNA
8458	19059	31845	0.71	1.0E-113		NT	Homo sapiens glutamate receptor, ionotropic, N-methyl D-aspartate 2A (GRIN2A) mRNA
7362	19888	32751	0.77	1.0E-113	BE262161.1	EST_HUMAN	601152078F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3508362 5'
7362	19888	32752	0.77	1.0E-113	BE262161.1	EST_HUMAN	601152078F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3508362 5'
9024	21561	34488	3	1.0E-113	BE382842.1	EST_HUMAN	601297709F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3627554 5'
9024	21561	34489	3	1.0E-113	BE382842.1	EST_HUMAN	601297709F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3627554 5'
9322	21838		0.72	1.0E-113	BE772967.1	EST_HUMAN	RC1-F10134-280600-021-d02 F10134 Homo sapiens cDNA
9745	22243	35224	1.2	1.0E-113		NT	Homo sapiens transmembrane protein 2 (TMEM2), mRNA
9843	22341	35323	0.55	1.0E-113	M21535.1	NT	Human erg protein (ets-related gene) mRNA, complete cds
9863	22458	35441	0.81	1.0E-113		NT	Homo sapiens RAN binding protein 7 (RANBP7), mRNA
9863	22458	35442	0.81	1.0E-113		NT	Homo sapiens RAN binding protein 7 (RANBP7), mRNA
11002	23516	36551	1.71	1.0E-113	AW500519.1	EST_HUMAN	UI-HF-BN0-alk-b-12-Q-UI.r1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3077328 5'
11011	23525	36559	2.11	1.0E-113	AW630291.1	EST_HUMAN	h181809.Y1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2969176 5' similar to TR:O60327 O60327
11011	23525	36560	2.11	1.0E-113	AW630291.1	EST_HUMAN	h181809.Y1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2969176 5' similar to TR:O60327 O60327
11097	19059	31844	1.58	1.0E-113		NT	Homo sapiens glutamate receptor, ionotropic, N-methyl D-aspartate 2A (GRIN2A) mRNA

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Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11097	19059	31845	1.58	1.0E-113	6006002	NT	Homo sapiens glutamate receptor, ionotropic, N-methyl D-aspartate 2A (GRIN2A) mRNA
11141	23049	36891	3.51	1.0E-113	BE292868.1	EST_HUMAN	G01105529F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2988368 5'
11370	23822	36884	2.53	1.0E-113	AA580720.1	EST_HUMAN	nc80b03.r1 NCL_CGAP_GC1 Homo sapiens cDNA clone IMAGE:797069 5' similar to SW:FEN1_HUMAN P39748 FLAP ENDONUCLEASE-1;
11370	23822	36885	2.53	1.0E-113	AA580720.1	EST_HUMAN	nc80b03.r1 NCL_CGAP_GC1 Homo sapiens cDNA clone IMAGE:797069 5' similar to SW:FEN1_HUMAN P39748 FLAP ENDONUCLEASE-1;
62	12741	25213	1.2	1.0E-114	Y17151.2	NT	Homo sapiens mRNA for multidrug resistance protein 3 (ABCC3)
62	12741	25214	1.2	1.0E-114	Y17151.2	NT	Homo sapiens mRNA for multidrug resistance protein 3 (ABCC3)
62	12741	25215	1.2	1.0E-114	Y17151.2	NT	Homo sapiens mRNA for multidrug resistance protein 3 (ABCC3)
673	13287	25779	22.22	1.0E-114	T70551.1	EST_HUMAN	ydl5c01.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:108298 3' similar to gb:A21187 ALPHA-2-MACROGLOBULIN PRECURSOR (HUMAN); contains Alu repetitive element;
1109	13713	26223	2.93	1.0E-114	8923087	NT	Homo sapiens hypothetical protein FLJ20080 (FLJ20080), mRNA
1358	13950	28478	3.57	1.0E-114	7657529	NT	Homo sapiens rhabdoid tumor deletion region protein 1 (RTDR1), mRNA
1684	14278	26809	1.26	1.0E-114	6631094	NT	Homo sapiens minichromosome maintenance deficient (S. cerevisiae) 3 (MCM3), mRNA
1711	14304	28841	7.13	1.0E-114	6878073	NT	Homo sapiens nucleoporin-like protein 1 (NLP_1), mRNA
2830	12727	25189	2.13	1.0E-114	AB033102.1	NT	Homo sapiens mRNA for KIAA1276 protein, partial cds
2830	12727	25190	2.13	1.0E-114	AB033102.1	NT	Homo sapiens mRNA for KIAA1276 protein, partial cds
3165	15779	28250	2.36	1.0E-114	X04086.1	NT	Human gene for catalase (EC 1.11.1.6) exon 2 mapping to chromosome 11, band p13
3207	15819	28295	1.02	1.0E-114	BF206374.1	EST_HUMAN	601869932F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4100214 5'
4088	16684	29142	1.81	1.0E-114	AF149773.1	NT	Homo sapiens NOD1 protein (NOD1) gene, exons 1, 2, and 3
4480	17065	29515	0.92	1.0E-114	J03171.1	NT	Human interferon-alpha receptor (HuIFN-alpha-Rec) mRNA, complete cds
5324	17886	30302	0.89	1.0E-114	BE275324.1	EST_HUMAN	601122173F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3346099 5'
5360	17920	30334	0.93	1.0E-114	AA194488.1	EST_HUMAN	z005e05.r1 Sirelagene muscle 937209 Homo sapiens cDNA clone IMAGE:628832 5' similar to contains MER22.13 MER22 repetitive element;
5597	18227	30674	1.38	1.0E-114	4506890	NT	Homo sapiens sema domain, seven thrombospondin repeats (type 1 and type 1-like), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 5A (SEMA5A) mRNA
5597	18227	30675	1.36	1.0E-114	4506890	NT	Homo sapiens sema domain, seven thrombospondin repeats (type 1 and type 1-like), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 5A (SEMA5A) mRNA
5781	18408	31122	1.35	1.0E-114	9257201	NT	Homo sapiens clathrin, heavy polypeptide-like 1 (CLTCL1), transcript variant 2, mRNA
7137	19476		1.13	1.0E-114	AB041533.1	NT	Homo sapiens HCMGOT-1 mRNA for sperm antigen, complete cds
7288	19818	32674	1.2	1.0E-114	AU134187.1	EST_HUMAN	AU134187 OVARC1 Homo sapiens cDNA clone OVARC1001444 5'
7288	19818	32675	1.2	1.0E-114	AU134187.1	EST_HUMAN	AU134187 OVARC1 Homo sapiens cDNA clone OVARC1001444 5'
7328	19853	32715	7.05	1.0E-114	Y18000.1	NT	Homo sapiens NF2 gene

Table 4

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7328	10853	32716	7.05	1.0E-114	Y18000.1	NT	Homo sapiens NF2 gene
7832	20374	33280	1.88	1.0E-114	4557800	NT	Homo sapiens gamma-aminobutyric acid (GABA) A receptor, alpha 2 (GABRA2) mRNA
8108	20849	33557	1.81	1.0E-114	A1363139.1	EST_HUMAN	qy68d08.x1 NCI_CGAP_Brn25 Homo sapiens cDNA clone IMAGE:2017163 3'
8108	20849	33558	1.81	1.0E-114	A1363139.1	EST_HUMAN	qy68d08.x1 NCI_CGAP_Brn25 Homo sapiens cDNA clone IMAGE:2017163 3'
8635	21174	34093	4.12	1.0E-114	U63041.1	NT	Human neural cell adhesion molecule CD56 mRNA, complete cds
8702	21241	34165	5.52	1.0E-114	AB011133.1	NT	Homo sapiens mRNA for KIAA0561 protein, partial cds
8702	21241	34166	5.52	1.0E-114	AB011133.1	NT	Homo sapiens mRNA for KIAA0561 protein, partial cds
9110	21846	34586	0.92	1.0E-114	BF109832.1	EST_HUMAN	TRQ8UHN6 Q8UHN6 TRANSMEMBRANE PROTEIN 2 ;
9335	21849		18.44	1.0E-114	AW327455.1	EST_HUMAN	dq03f05.x1 NIH_MGC_2 Homo sapiens cDNA clone IMAGE:2848744 5'
9384	20322	33227	3.14	1.0E-114	AF077754.1	NT	Homo sapiens tyrosine kinase p80c-src (SRC) gene, exon 12 and partial cds
9487	21892		6.13	1.0E-114	M13538.1	NT	Human ceruloplasmin mRNA
10045	22540	35537	0.94	1.0E-114	BE870004.1	EST_HUMAN	601449752F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:38553500 5'
10066	22561	35556	1.32	1.0E-114	AL163227.2	NT	Homo sapiens chromosome 21 segment HS21C027
10434	22828	35935	0.71	1.0E-114	BE171984.1	EST_HUMAN	MRO-HT0558-250200-002-007 HT0559 Homo sapiens cDNA
							ba73g12.y1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:2908086 5' similar to gb:X17208 40S RIBOSOMAL PROTEIN S4 (HUMAN); gb:M20692 Mouse LLRep3 protein mRNA from a repetitive element, complete (MOUSE);
10666	23198		13.82	1.0E-114	BE302668.1	EST_HUMAN	
11070	23592	36622	3.31	1.0E-114	AV733454.1	EST_HUMAN	AV733454 cda Homo sapiens cDNA clone cdaABA08 5'
11070	23592	36623	3.31	1.0E-114	AV733454.1	EST_HUMAN	AV733454 cda Homo sapiens cDNA clone cdaABA08 5'
12137	25093		3.79	1.0E-114	11418041	NT	Homo sapiens TNF-inducible protein CG12-1 (CG12-1), mRNA
12410	24555	30909	2.85	1.0E-114	11034850	NT	Homo sapiens hypothetical protein (DJ1042K10.2), mRNA
12410	24555	30910	2.85	1.0E-114	11034850	NT	Homo sapiens hypothetical protein (DJ1042K10.2), mRNA
25	12704	25162	6.12	1.0E-115	4758111	NT	Homo sapiens HLA-B associated transcript-1 (D8S81E) mRNA
135	12800	25288	2.34	1.0E-115	4505838	NT	Homo sapiens polymerase (RNA) II (DNA directed) polypeptide A (220KD) (POLR2A) mRNA
139	12804		8.73	1.0E-115	4557887	NT	Homo sapiens keratin 18 (KRT18) mRNA
314	12868	25456	3.77	1.0E-115	AW804759.1	EST_HUMAN	QV4-UM0094-300300-156-b08 UM0094 Homo sapiens cDNA
							q06f01.x1 NCI_CGAP_GC4 Homo sapiens cDNA clone IMAGE:1949809 3' similar to TR-O00538 O00538
561	13192	25670	0.95	1.0E-115	A1339206.1	EST_HUMAN	TTF-I-INTERACTING PEPTIDE 5 ;
561	13192	25671	0.95	1.0E-115	A1339206.1	EST_HUMAN	TTF-I-INTERACTING PEPTIDE 5 ;
819	13436	25942	1.29	1.0E-115	5174702	NT	Homo sapiens transforming growth factor beta-activated kinase-binding protein 1 (TAB1), mRNA
819	13436	25943	1.29	1.0E-115	5174702	NT	Homo sapiens transforming growth factor beta-activated kinase-binding protein 1 (TAB1), mRNA
821	13438	25945	190.74	1.0E-115	4503784	NT	Homo sapiens ferritin, heavy polypeptide 1 (FTH1) mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1806	14198	26730	1.2	1.0E-115	AF229180.1	NT	Homo sapiens alpha-aminoadipate semialdehyde synthase mRNA, complete cds
1806	14198	28731	1.2	1.0E-115	AF229180.1	NT	Homo sapiens alpha-aminoadipate semialdehyde synthase mRNA, complete cds
1881	14467	27025	1.19	1.0E-115	U78027.1	NT	Homo sapiens Bruton's tyrosine kinase (BTK), alpha-D-galactosidase A (GLA), L44-like ribosomal protein (L44L) and FTP3 (FTP3) genes, complete cds
2125	14703	27273	1.11	1.0E-115	BE745469.1	EST_HUMAN	601579838F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3928832 5'
2125	14703	27274	1.11	1.0E-115	BE745469.1	EST_HUMAN	601579838F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3928832 5'
3149	15763	28230	2.81	1.0E-115	AJ245922.1	NT	Homo sapiens mRNA for alpha-tubulin 8 (TUBA8 gene)
3149	15763	28231	2.81	1.0E-115	AJ245922.1	NT	Homo sapiens mRNA for alpha-tubulin 8 (TUBA8 gene)
3519	16124	28604	2.12	1.0E-115	AJ277892.1	NT	Homo sapiens partial TTN gene for titin
4115	16709	29164	4.23	1.0E-115	AB002348.2	NT	Homo sapiens mRNA for KIAA0350 protein, partial cds
4353	16940	29382	1.31	1.0E-115	AL137163.1	NT	Novel human gene mapping to chromosome X
4490	17075	29325	2.98	1.0E-115	8912859	NT	Homo sapiens sir2-like 3 (SIRT3), mRNA
4529	17113	29557	4.4	1.0E-115	4758279	NT	Homo sapiens EphA4 (EPHA4), mRNA
4783	17363	29813	2.89	1.0E-115	AL096857.1	NT	Novel human mRNA from chromosome 1, which has similarities to BAT2 genes
4783	17363	29814	2.89	1.0E-115	AL096857.1	NT	Novel human mRNA from chromosome 1, which has similarities to BAT2 genes
5032	17606	30050	3.79	1.0E-115	AL163268.2	NT	Homo sapiens chromosome 21 segment HS21C068
5032	17606	30051	3.79	1.0E-115	AL163268.2	NT	Homo sapiens chromosome 21 segment HS21C068
5550	18182	30597	2.42	1.0E-115	AW970335.1	EST_HUMAN	EST392416 MAGC resequences, MAGK Homo sapiens cDNA
5617	18246	30897	1.07	1.0E-115	BF665387.1	EST_HUMAN	602119346F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4276738 5'
5732	18358	31063	1.79	1.0E-115	11425128	NT	Homo sapiens similar to ER to nucleus signalling 1 (H. sapiens) (LOC63433), mRNA
5732	18358	31064	1.79	1.0E-115	11425128	NT	Homo sapiens similar to ER to nucleus signalling 1 (H. sapiens) (LOC63433), mRNA
5869	18491	31217	1.1	1.0E-115	AI928799.1	EST_HUMAN	au64g01.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2519568 3' similar to gb:L07807
5869	18491	31218	1.1	1.0E-115	AI928799.1	EST_HUMAN	au64g01.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2519568 3' similar to gb:L07807
6408	19011	31793	0.89	1.0E-115	11426786	NT	Homo sapiens sperm surface protein (HSS), mRNA
6408	19011	31794	0.89	1.0E-115	11426786	NT	Homo sapiens sperm surface protein (HSS), mRNA
6529	19129	31923	20.52	1.0E-115	11426038	NT	Homo sapiens similar to ribosomal protein S28 (H. sapiens) (LOC63436), mRNA
6649	19245	32047	1.74	1.0E-115	7661883	NT	Homo sapiens KIAA0054 gene product; Helicase (KIAA0054), mRNA
6649	19245	32048	1.74	1.0E-115	7661883	NT	Homo sapiens KIAA0054 gene product; Helicase (KIAA0054), mRNA
7014	19512	32333	0.89	1.0E-115	T86774.1	EST_HUMAN	y885x08.r1 Soares fetal liver spleen 1NLS Homo sapiens cDNA clone IMAGE:115085 5' similar to SP-DPOG_YEAST P15901 DNA POLYMERASE GAMMA
7322	19849	32709	1.16	1.0E-115	AI076598.1	EST_HUMAN	oz31a06.x1 Soares fetal brain 00004 Homo sapiens cDNA clone IMAGE:1676914 3'
7322	19849	32710	1.16	1.0E-115	AI076598.1	EST_HUMAN	oz31a06.x1 Soares fetal brain 00004 Homo sapiens cDNA clone IMAGE:1676914 3'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7438	19882	32828	6.85	1.0E-115	AB023212.1	NT	Homo sapiens mRNA for KIAA0985 protein, partial cds
8101	20642	33553	12.83	1.0E-115	BE830187.1	EST_HUMAN	RC6-ET0081-130700-011-G01 ET0081 Homo sapiens cDNA
8101	20642	33554	12.83	1.0E-115	BE830187.1	EST_HUMAN	RC6-ET0081-130700-011-G01 ET0081 Homo sapiens cDNA
8747	21286	34207	4.14	1.0E-115	11434772	NT	Homo sapiens eukaryotic translation initiation factor 4B (EIF4B), mRNA
9690	22189	35182	0.58	1.0E-115	BF382029.1	EST_HUMAN	601816352F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4050108 5'
9610	22407	35382	2.13	1.0E-115	AB002338.1	NT	Human mRNA for KIAA0338 gene, partial cds
9610	22407	35383	2.13	1.0E-115	AB002338.1	NT	Human mRNA for KIAA0338 gene, partial cds
10414	22608	35906	1.08	1.0E-115	A1221878.1	EST_HUMAN	qg99e09.x1 Soares_NFL_I_GBC_S1 Homo sapiens cDNA clone IMAGE:1843336 3'
10414	22608	35907	1.08	1.0E-115	A1221878.1	EST_HUMAN	qg99e09.x1 Soares_NFL_I_GBC_S1 Homo sapiens cDNA clone IMAGE:1843336 3'
10420	22814	35914	0.68	1.0E-115	A1524687.1	EST_HUMAN	ih12a07.x1 NCI CGAP CLL1 Homo sapiens cDNA clone IMAGE:2118036 3' similar to TR:O16128 O16129
10448	22842	35952	0.79	1.0E-115	BE886265.1	EST_HUMAN	PHENYLALANINE TRNA SYNTHETASE
10596	23130	36144	3.79	1.0E-115	AW571544.1	EST_HUMAN	601509879F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:2839239 3' similar to SW:CAYP_CANFA
11140	23648	36689	1.94	1.0E-115	BE045890.1	EST_HUMAN	P10463 CALYCPHOSINE
11140	23648	36690	1.94	1.0E-115	BE045890.1	EST_HUMAN	hg54c10.x1 NCI CGAP_Pan3 Homo sapiens cDNA clone IMAGE:3123186 3' similar to TR:O88378 O88378
11276	23729	36784	2.64	1.0E-115	4502528	NT	PRP4 PROTEIN KINASE HOMOLOG
11688	24111		1.46	1.0E-115	AF240788.1	NT	PRP4 PROTEIN KINASE HOMOLOG
598	13227	25701	2.19	1.0E-116	BE275502.1	EST_HUMAN	hg54c10.x1 NCI CGAP_Pan3 Homo sapiens cDNA clone IMAGE:3123186 3' similar to TR:O88378 O88378
833	13450	25957	1.23	1.0E-116	4507334	NT	PRP4 PROTEIN KINASE HOMOLOG
892	13508		0.8	1.0E-116	4507334	NT	Homo sapiens calcium channel, voltage-dependent, alpha 1E subunit (CACNA1E) mRNA
2040	14622	27190	3.39	1.0E-116	5174478	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
2040	14622	27191	3.39	1.0E-116	5174478	NT	601121347F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:2988875 5'
2072	14652	27224	1.95	1.0E-116	AU133080.1	EST_HUMAN	Homo sapiens synaptobrevin 1 (SYNJ1), mRNA
2145	15458	27293	2.87	1.0E-116	M19824.1	NT	Homo sapiens synaptobrevin 1 (SYNJ1), mRNA
2145	15458	27294	2.87	1.0E-116	M19824.1	NT	Homo sapiens pericentriin (PCNT) mRNA
2346	14917	27491	1.97	1.0E-116	5453941	NT	Homo sapiens pericentriin (PCNT) mRNA
2380	14949		0.97	1.0E-116	U78308.1	NT	AU133080 NT2RP4 Homo sapiens cDNA clone NT2RP4001228 5'
2487	15081	27835	2.84	1.0E-116	AB018333.1	NT	Human apolipoprotein B-100 (apoB) gene, exons 17 and 18
2762	15404	27883	2.18	1.0E-116	BE889256.1	EST_HUMAN	Human apolipoprotein B-100 (apoB) gene, exons 17 and 18
							Homo sapiens protein phosphatase, EF hand calcium-binding domain 1 (PPEF1) mRNA
							Human olfactory receptor olfr17-201-1 (OR17-201-1) gene, olfactory receptor olfr17-32 (OR17-32) gene and olfactory receptor pseudo_olfr17-01 (OR17-01) pseudogene, complete cds
							Homo sapiens mRNA for KIAA0790 protein, partial cds
							601513337F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3914800 5'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3209	15821	28298	4.18	1.0E-116	L77570.1	NT	Homo sapiens DiGeorge syndrome critical region, centromeric end
3209	15821	28297	4.18	1.0E-116	L77570.1	NT	Homo sapiens DiGeorge syndrome critical region, centromeric end
4487	17053	29497	2.11	1.0E-116	5031954	NT	Homo sapiens sodium phosphate transporter 3 (NPT3) mRNA
4981	17555	29997	1.86	1.0E-116	A1807098.1	EST_HUMAN	PM-BT135-070498-016 BT135 Homo sapiens cDNA
5363	17923	30337	0.88	1.0E-116	AJ243213.1	NT	Homo sapiens partial 5-HT4 receptor gene, exons 2 to 5
5483	18117	30525	0.82	1.0E-116	A1302082.1	EST_HUMAN	qnl18d04.x1 NCI_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1898695 3' similar to contains element MER25 repetitive element
6132	18746	31502	2.1	1.0E-116	W42822.1	EST_HUMAN	zc24d07.r1 Soares_senescent_fibroblasts_NHHSF Homo sapiens cDNA clone IMAGE:323245 5' similar to SW:MDHM_MOUSE P08249 MALATE DEHYDROGENASE, MITOCHONDRIAL PRECURSOR
6359	18963	31740	1.81	1.0E-116	AB046856.1	NT	Homo sapiens mRNA for KIAA1636 protein, partial cds
6359	18963	31741	1.81	1.0E-116	AB046856.1	NT	Homo sapiens mRNA for KIAA1636 protein, partial cds
6423	19028	31809	1.14	1.0E-116	BE408097.1	EST_HUMAN	601302281F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3636764 5'
6530	19130	31924	1.96	1.0E-116	BF677910.1	EST_HUMAN	602084730F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4249087 5'
6637	19233		1.82	1.0E-116	BE158133.1	EST_HUMAN	MR2-HT0379-210200-102-b04 HT0379 Homo sapiens cDNA
7023	19557	32382	2.08	1.0E-116	C02844.1	EST_HUMAN	C02944 Human heart cDNA (YNakamura) Homo sapiens cDNA clone 3NHC0567
7254	19782	32638	7.18	1.0E-116	AV716314.1	EST_HUMAN	AV716314 DCB Homo sapiens cDNA clone DCBCCG08 5'
8310	20851	33775	1.4	1.0E-116	AA354256.1	EST_HUMAN	EST62685 Jurkat T-cells V Homo sapiens cDNA 5' and similar to similar to keratin 2
8310	20851	33776	1.4	1.0E-116	AA354256.1	EST_HUMAN	EST62685 Jurkat T-cells V Homo sapiens cDNA 5' and similar to similar to keratin 2
8416	20956	33873	1.49	1.0E-116	A1804151.1	EST_HUMAN	GM-BT043-090289-075 BT043 Homo sapiens cDNA
8868	21407	34331	1.15	1.0E-116	BE565507.1	EST_HUMAN	601338268F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3680680 5'
9028	21565	34494	2.75	1.0E-116	A1216352.1	EST_HUMAN	qh08c05.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1844168 3' similar to gb:X53741.ma1 FIBULIN-1, ISOFORM A PRECURSOR (HUMAN)
9582	22092	35058	1.38	1.0E-116	11418648	NT	Homo sapiens laminin, alpha 2 (merosin, congenital muscular dystrophy) (LAMA2), mRNA
10171	22666	35661	0.67	1.0E-116	AJ277441.1	NT	Homo sapiens partial mRNA for xylosyltransferase I (XT-I) gene
10171	22666	35662	0.67	1.0E-116	AJ277441.1	NT	Homo sapiens partial mRNA for xylosyltransferase I (XT-I) gene
10250	22745	35733	0.82	1.0E-116	BE158913.1	EST_HUMAN	QV4-HT04071-281289-063 c08 HT04071 Homo sapiens cDNA
10567	23103	36117	3.89	1.0E-116	BF335849.1	EST_HUMAN	CM2-CT0482-300800-349-e06 CT0482 Homo sapiens cDNA
11015	23529	36565	3.63	1.0E-116	A1367140.1	EST_HUMAN	qq41e04.x1 Soares_NHMPu_S1 Homo sapiens cDNA clone IMAGE:1835102 3' similar to WP:B0495.7 CE01765
12456	24948		3.62	1.0E-116	AL134889.1	EST_HUMAN	DKFp762L1110_r1 762 (synonym: hmel2) Homo sapiens cDNA clone DKFp762L1110 5'
594	13214	25081	1.98	1.0E-117	4828636	NT	Homo sapiens acetyl-Coenzyme A carboxylase alpha (ACACA), mRNA
1116	15433	26231	1.46	1.0E-117	AF124393.1	NT	Mus musculus fragile-X-related protein 1 (Fxr1h) gene, exons 13a through 15
1268	13865	26382	0.81	1.0E-117	AF264750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1789	14379	26923	1.28	1.0E-117	AF123320.1	NT	Homo sapiens lymphocyte activation-associated protein mRNA, complete cds
1871	14457	27014	5.27	1.0E-117	M19816.1	NT	Human apolipoprotein B-100 (apoB) gene, exon 10
2252	14828	27402	1.15	1.0E-117	AW957699.1	EST_HUMAN	EST369769 MAGE resequences, MAGE Homo sapiens cDNA
3308	15917	28394	1.53	1.0E-117	AA978114.1	EST_HUMAN	op32c11.s1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1578548 3'
4062	16659	29122	8.83	1.0E-117	AA318723.1	EST_HUMAN	EST188414 HCC cell line (metastasis to liver in mouse) II Homo sapiens cDNA 5' end similar to ribosomal protein L29
4438	17022	29462	2.27	1.0E-117	8659564	NT	Homo sapiens collagen, type IV, alpha 5 (Alport syndrome) (COL4A5), mRNA
4877	17259	29710	2.1	1.0E-117	AL042120.1	EST_HUMAN	DKFZp434C1120_r1 434 (synonym: hites3) Homo sapiens cDNA clone DKFZp434C1120 5'
4933	17508	29855	10.14	1.0E-117	AF134304.2	NT	Homo sapiens Scar2 (SCAR2) gene, partial cds
4933	17508	29855	10.14	1.0E-117	AF134304.2	NT	Homo sapiens Scar2 (SCAR2) gene, partial cds
5074	17647	30088	3.29	1.0E-117	AB020873.1	NT	Homo sapiens mRNA for KIAA0868 protein, complete cds
5551	18183	30598	3.8	1.0E-117	BE730508.1	EST_HUMAN	601592657F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3832214 5'
7473	19895	32859	5.22	1.0E-117	L76571.1	NT	Homo sapiens nuclear hormone receptor (shp) gene, 3' end of cds
7473	19895	32860	5.22	1.0E-117	L76571.1	NT	Homo sapiens nuclear hormone receptor (shp) gene, 3' end of cds
7473	19895	32860	5.22	1.0E-117	L76571.1	NT	Homo sapiens nuclear hormone receptor (shp) gene, 3' end of cds
7550	20069	32944	4.48	1.0E-117	AV717788.1	EST_HUMAN	AV717788 DCB Homo sapiens cDNA clone DCBBAE01 5'
7550	20069	32945	4.48	1.0E-117	AV717788.1	EST_HUMAN	AV717788 DCB Homo sapiens cDNA clone DCBBAE01 5'
7919	20481	33367	3.77	1.0E-117	AI950145.1	EST_HUMAN	wp86b07.x1 NC1_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2468828 3' similar to TR.O75065
8253	20794	33711	1.07	1.0E-117	10834989	NT	O75065 KIAA0477 PROTEIN.1
8253	20794	33712	1.07	1.0E-117	10834989	NT	Homo sapiens neural cell adhesion molecule 1 (NCAM1), mRNA
8350	20891	33811	1.32	1.0E-117	AI904151.1	EST_HUMAN	Homo sapiens neural cell adhesion molecule 1 (NCAM1), mRNA
8350	20891	33812	1.32	1.0E-117	AI904151.1	EST_HUMAN	GM-BT043-090299-075 BT043 Homo sapiens cDNA
9223	21739	34682	1.73	1.0E-117	D16524.1	NT	GM-BT043-090299-075 BT043 Homo sapiens cDNA
9701	22200	35172	1.71	1.0E-117	BE733922.1	EST_HUMAN	Human gene for very low density lipoprotein receptor, exon 11
9857	24766	35335	0.83	1.0E-117	AF090033.1	NT	601598317F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3843748 5'
10462	22958	35867	1.98	1.0E-117	11420222	NT	Homo sapiens gamma-aminobutyric acid type B receptor 2 (GABABR2) mRNA, complete cds
10737	23262	36277	1.89	1.0E-117	D83776.1	NT	Homo sapiens Drosophila Kelch like protein (DKELCHL), mRNA
10901	23421	36439	1.81	1.0E-117	W80605.1	EST_HUMAN	Human mRNA for KIAA0191 gene, partial cds
10917	23436	36458	1.85	1.0E-117	11424835	NT	zid83b11.r1 Soares_fetal_heart_Nb1H19W Homo sapiens cDNA clone IMAGE:347228 5' similar to gb.M14219 BONE PROTEOGLYCAN II PRECURSOR (HUMAN);
10917	23436	36457	1.65	1.0E-117	11424835	NT	Homo sapiens protein (peptidyl-prolyl cis/trans isomerase) NIMA-interacting 1 (PIN1), mRNA
11153	23660	36704	3.46	1.0E-117	AB011541.1	NT	Homo sapiens protein (peptidyl-prolyl cis/trans isomerase) NIMA-interacting 1 (PIN1), mRNA
11153	23660	36705	3.46	1.0E-117	AB011541.1	NT	Homo sapiens mRNA for MEGF8, partial cds
11272	23725		31.65	1.0E-117	BE269856.1	EST_HUMAN	Homo sapiens mRNA for MEGF8, partial cds
							601186203F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3544296 5'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11464	23914	36981	2.04	1.0E-117	4501848	NT	Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 3 (ABCA3), mRNA
11464	23914	36982	2.04	1.0E-117	4501848	NT	Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 3 (ABCA3), mRNA
11936	25028		1.7	1.0E-117	AF224669.1	NT	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
12662	15433	26231	1.81	1.0E-117	AF124393.1	NT	Mus musculus fragile-X-related protein 1 (Fxr1h) gene, exons 13a through 15
74	12752	25231	8.91	1.0E-118	AF161500.1	NT	Homo sapiens HSPC151 mRNA, complete cds
99	12775	25257	0.88	1.0E-118	AL045854.1	EST_HUMAN	DKFZp434056_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434056 5'
543	13174	25654	5.79	1.0E-118	7657016	NT	Homo sapiens hypothetical protein (DJ328E 19 C1.1), mRNA
947	15428	26073	1.3	1.0E-118	5174680	NT	Homo sapiens sine oculis homeobox (Drosophila) homolog 1 (SIX1) mRNA
2275	14849	27425	1.93	1.0E-118	BE389705.1	EST_HUMAN	601281947F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3604019 5'
2275	14849	27426	1.93	1.0E-118	BE389705.1	EST_HUMAN	601281947F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3604019 5'
2275	14849	27427	1.93	1.0E-118	BE389705.1	EST_HUMAN	601281947F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3604019 5'
2367	14938		0.98	1.0E-118	AW951728.1	EST_HUMAN	EST363799 MAGE resequences, MAGB Homo sapiens cDNA
2768	15322	27888	2.82	1.0E-118	U07000.1	NT	Human breakpoint cluster region (BCR) gene, complete cds
2768	15322	27889	2.82	1.0E-118	U07000.1	NT	Human breakpoint cluster region (BCR) gene, complete cds
3138	15752		4.01	1.0E-118	Y13932.1	NT	Homo sapiens PRKY exon 7
3229	15841	28321	6.49	1.0E-118	A1347694.1	EST_HUMAN	qp01105.x1 NCI CGAP_Kid5 Homo sapiens cDNA clone IMAGE:1918769 3'
3229	15841	28322	6.49	1.0E-118	A1347694.1	EST_HUMAN	qp01105.x1 NCI CGAP_Kid5 Homo sapiens cDNA clone IMAGE:1918769 3'
4162	16753	28204	9.69	1.0E-118	D23660.1	NT	Human mRNA for ribosomal protein, complete cds
4817	17395	29848	1.45	1.0E-118	11425783	NT	Homo sapiens KIAA0478 gene product (KIAA0478), mRNA
5616	18245	30695	1.88	1.0E-118	AF142624.1	NT	Homo sapiens calcium channel gamma 4 subunit (CACNG4) gene, exon 3
5616	18245	30698	1.89	1.0E-118	AF142624.1	NT	Homo sapiens calcium channel gamma 4 subunit (CACNG4) gene, exon 3
5813	18437	31158	1.01	1.0E-118	11422054	NT	Homo sapiens reelin (RELN), mRNA
5813	18437	31159	1.01	1.0E-118	11422054	NT	Homo sapiens reelin (RELN), mRNA
5880	18513	31239	0.77	1.0E-118	U08892.1	NT	Human GS2 gene, exon 6
5890	18513	31240	0.77	1.0E-118	U08892.1	NT	Human GS2 gene, exon 6
5944	18564	31294	0.92	1.0E-118	M55109.1	NT	Human cystic fibrosis transmembrane conductance regulator (CFTR) gene, exon 4
6023	18642	31363	1.2	1.0E-118	11425900	NT	Homo sapiens T-box 4 (TBX4), mRNA
6023	18642	31364	1.2	1.0E-118	11425900	NT	Homo sapiens T-box 4 (TBX4), mRNA
6096	18714	31464	1.4	1.0E-118	11420764	NT	Homo sapiens transient receptor potential channel 5 (TRPC5), mRNA
6793	19384	32199	1.58	1.0E-118	4557732	NT	Homo sapiens latent transforming growth factor beta binding protein 2 (LTBP2) mRNA
6793	19384	32200	1.58	1.0E-118	4557732	NT	Homo sapiens latent transforming growth factor beta binding protein 2 (LTBP2) mRNA
7154	19686	32528	1.03	1.0E-118	AL043761.1	EST_HUMAN	DKFZp43400127_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp43400127 5'
7154	19686	32529	1.03	1.0E-118	AL043761.1	EST_HUMAN	DKFZp43400127_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp43400127 5'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7597	20111	32986	4.89	1.0E-118	11431050	NT	Homo sapiens chromosome 2 open reading frame 3 (CZORF3), mRNA
7609	20122	32989	0.7	1.0E-118	L46590.1	NT	Homo sapiens very long chain acyl-CoA dehydrogenase gene, exons 1-20, complete cds
7913	20455	33381	2.75	1.0E-118	BE781223.1	EST_HUMAN	601469159F-1 NIH_MGC_87 Homo sapiens cDNA clone IMAGE:3872247 5'
8323	20864	33788	6.08	1.0E-118	BE082855.1	EST_HUMAN	QVQ-BT0263-090200-097-h03 BT0263 Homo sapiens cDNA
8323	20864	33788	6.08	1.0E-118	BE082855.1	EST_HUMAN	QVQ-BT0263-090200-097-h03 BT0263 Homo sapiens cDNA
8328	20869	33792	1.44	1.0E-118	AA443024.1	EST_HUMAN	z98d07.r1 Soares_NHMPu_S1 Homo sapiens cDNA clone IMAGE:811789 5'
8328	20869	33793	1.44	1.0E-118	AA443024.1	EST_HUMAN	z98d07.r1 Soares_NHMPu_S1 Homo sapiens cDNA clone IMAGE:811789 5'
8607	21146	34061	0.89	1.0E-118	AB002381.1	NT	Human mRNA for KIAA0383 gene, partial cds
8607	21146	34062	0.89	1.0E-118	AB002381.1	NT	Human mRNA for KIAA0383 gene, partial cds
8655	21194	34112	1.61	1.0E-118	4557732	NT	Homo sapiens latent transforming growth factor beta binding protein 2 (LTBP2) mRNA
8655	21194	34113	1.61	1.0E-118	4557732	NT	Homo sapiens latent transforming growth factor beta binding protein 2 (LTBP2) mRNA
8655	21503	34425	5.31	1.0E-118	BE263134.1	EST_HUMAN	Homo sapiens latent transforming growth factor beta binding protein 2 (LTBP2) mRNA
8655	21534	34484	0.52	1.0E-118	AL048474.2	EST_HUMAN	DKFZp586K1824_r1 586 (synonym: hute1) Homo sapiens cDNA clone DKFZp586K1824
8912	22012	34971	1.62	1.0E-118	7657016	NT	Homo sapiens hypothetical protein (DJ328E19.C1.1), mRNA
8997	22394	35370	0.62	1.0E-118	AL138321.1	EST_HUMAN	DKFZp5470017_r1 547 (synonym: hbr1) Homo sapiens cDNA clone DKFZp5470017 5'
10237	22732	35723	0.98	1.0E-118	BE736213.1	EST_HUMAN	601307146F-1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3641603 5'
10237	22732	35724	0.98	1.0E-118	BE736213.1	EST_HUMAN	601307146F-1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3641603 5'
10277	22772	35761	1.6	1.0E-118	BF195407.1	EST_HUMAN	7n17609.x1 NCL_CGAP_Brn23 Homo sapiens cDNA clone IMAGE:3564785.3' similar to SW_ZP3A_HUMAN
10425	22819	35921	0.52	1.0E-118	AW296351.1	EST_HUMAN	P21754 ZONA PELLUCIDA SPERM-BINDING PROTEIN 3A PRECURSOR ;
11157	23684	36710	4.87	1.0E-118	AA315007.1	EST_HUMAN	UHL-BW0-alc-a-07-0-JL.s1 NCL_CGAP_Sub6 Homo sapiens cDNA clone IMAGE:2729772 3'
11433	23683	36949	1.94	1.0E-118	BE908676.1	EST_HUMAN	EST186814 HCC cell line (metastasis to liver in mouse) II Homo sapiens cDNA 5' end similar to dynein, light chain 1, cytoplasmic
11433	23683	36950	1.94	1.0E-118	BE908676.1	EST_HUMAN	601499514F-1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3601563 5'
11436	23686	36953	1.99	1.0E-118	BF093687.1	EST_HUMAN	601499514F-1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3601563 5'
11436	23686	36954	1.69	1.0E-118	BF093687.1	EST_HUMAN	QVQ-UM0091-120900-385-b12 UM0091 Homo sapiens cDNA
11608	24049	37115	1.58	1.0E-118	BE218235.1	EST_HUMAN	QVQ-UM0091-120900-385-b12 UM0091 Homo sapiens cDNA
788	13408	25911	2.89	1.0E-118	AF170492.1	NT	h38a08.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3175474 3' similar to TR-Q9Z2H4
1075	15432	26189	1.82	1.0E-119	7705607	NT	Q9Z2H4 G PROTEIN-COUPLED RECEPTOR LGR4 ;
1977	14560	27118	2.24	1.0E-119	AB023147.1	NT	Homo sapiens chloride channel CLC4 (CLC4) mRNA, complete cds
3136	15750	28218	1.04	1.0E-119	8922203	NT	Homo sapiens CGI-105 protein (LOC51011), mRNA
3277	15888		0.79	1.0E-119	AA916760.1	EST_HUMAN	Homo sapiens hypothetical protein FLJ10052 (FLJ10052), mRNA
							on10b05.s1 NCL_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1556241 3' similar to WP_E04F6.2
							CE01214 ;

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4026	18624	29086	1.08	1.0E-119	4504116	NT	Homo sapiens glutamate receptor, ionotropic, kainate 1 (GRIK1) mRNA
5540	18172	30587	3.45	1.0E-119	AU133399.1	EST_HUMAN	AU133399 NT2RP4 Homo sapiens cDNA clone NT2RP4001991 5'
5553	18185	30600	15.55	1.0E-119	M89914.1	NT	Human neurofibromin (NF1) gene, complete cds
5557	18189	30605	3.01	1.0E-119	BE936121.1	EST_HUMAN	RC1.NN0073-250800-018-g06 NN0073 Homo sapiens cDNA
5625	18254	30723	1.52	1.0E-119	AV693731.1	EST_HUMAN	AV693731 GKC Homo sapiens cDNA clone GKCDHB03 5'
6276	18884	31652	5.76	1.0E-119	AI150703.1	EST_HUMAN	qb77c09.x1 Soares fetal heart NBHH19W Homo sapiens cDNA clone IMAGE:1706128 3' similar to SW/K1CJ_MOUSE P02535 KERA TIN, TYPE I CYTOSKELETAL 10 ;
6429	19032	31815	0.68	1.0E-119	AF315683.1	NT	Homo sapiens matrix metalloproteinase 28 (MMP28) mRNA, complete cds
6429	19032	31816	0.68	1.0E-119	AF315683.1	NT	Homo sapiens matrix metalloproteinase 28 (MMP28) mRNA, complete cds
6473	19074	31857	1.06	1.0E-119	AI476732.1	EST_HUMAN	tm23110.x1 Soares NFL T_GBC_S1 Homo sapiens cDNA clone IMAGE:2157451 3'
6588	19185	31887	2.82	1.0E-119	X08292.1	NT	Human c-fos/fps proto-oncogene
6598	19195	32000	4.9	1.0E-119	AW974193.1	EST_HUMAN	EST386296 MAGE sequences, MAGM Homo sapiens cDNA
7440	19864	32830	1.27	1.0E-119	BE796814.1	EST_HUMAN	601592005F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3946081 5'
8596	21135	34050	0.94	1.0E-119	BE615150.1	EST_HUMAN	601280564F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:362528 5'
9870	22169	35145	0.55	1.0E-119	11545921	NT	Homo sapiens melanoma differentiation associated protein-5 (MDA5), mRNA
9821	22319	35303	1.04	1.0E-119	11036643	NT	Homo sapiens KIAA0477 gene product (KIAA0477), mRNA
10145	22640	35630	2.78	1.0E-119	AA465124.1	EST_HUMAN	aa3205.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:814977 5'
10388	22892	35886	0.92	1.0E-119	AJ297701.1	NT	Homo sapiens partial IL-12RB1 gene for IL-12 receptor beta1 chain, exons 16-17
10438	22932	35939	0.66	1.0E-119	11425837	NT	Homo sapiens hypothetical protein FLJ10206 (FLJ10206), mRNA
10438	22932	35940	0.66	1.0E-119	11425837	NT	Homo sapiens hypothetical protein FLJ10206 (FLJ10206), mRNA
10502	22986	36005	3.99	1.0E-119	AB032261.1	NT	Homo sapiens Scd mRNA for stearyl-CoA desaturase, complete cds
11082	23594		10.34	1.0E-119	BF569571.1	EST_HUMAN	602186072F1 NIH_MGC_45 Homo sapiens cDNA clone IMAGE:4310633 5'
11987	25012		3.05	1.0E-119	AW847519.1	EST_HUMAN	RC3-CT0212-240999-011-03 CT0212 Homo sapiens cDNA
258	12917	25404	0.65	1.0E-120	AB018301.1	NT	Homo sapiens mRNA for KIAA0758 protein, partial cds
323	12977	25465	0.77	1.0E-120	4507334	NT	Homo sapiens synaptobrevin 1 (SYN1), mRNA
1079	13684	26185	2.82	1.0E-120	AF248540.1	NT	Homo sapiens intersectin 2 (SH3D1B) mRNA, complete cds
1079	13684	26186	2.82	1.0E-120	AF248540.1	NT	Homo sapiens intersectin 2 (SH3D1B) mRNA, complete cds
1471	14063	26598	3.24	1.0E-120	N44873.1	EST_HUMAN	y40g12.r1 Soares melanocyte 2NBHM Homo sapiens cDNA clone IMAGE:273768 5'
1645	14237	26772	2.49	1.0E-120	AF167706.1	NT	Homo sapiens cysteine-rich repeat-containing protein S52 precursor, mRNA, complete cds
1842	14430	26983	1.84	1.0E-120	4557250	NT	Homo sapiens disintegrin and metalloprotease domain 10 (ADAM10) mRNA
3348	12977	25465	1.04	1.0E-120	4507334	NT	Homo sapiens synaptobrevin 1 (SYN1), mRNA
4449	17035	28478	1.68	1.0E-120	AF056490.1	NT	Homo sapiens cAMP-specific phosphodiesterase 8A (PDE8A) mRNA, partial cds
4449	17035	28479	1.68	1.0E-120	AF056490.1	NT	Homo sapiens cAMP-specific phosphodiesterase 8A (PDE8A) mRNA, partial cds
4769	17350	29801	2.82	1.0E-120	AF098463.1	NT	Homo sapiens stannocalcin (STC) gene, partial cds

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4769	17350	29802	2.82	1.0E-120	AF08463.1	NT	Homo sapiens stannocalcin (STC) gene, partial cds
5150	17720	30151	1.11	1.0E-120	AF054821.1	NT	Homo sapiens cytochrome P-450 mRNA, complete cds
5442	17967		0.95	1.0E-120	AL163213.2	NT	Homo sapiens chromosome 21 segment HS21C013
5911	18533	31258	13.5	1.0E-120	BF568222.1	EST_HUMAN	602183994F1 NIH_MGC_42 Homo sapiens cDNA clone IMAGE:4300174 5'
5911	18533	31259	13.5	1.0E-120	BF568222.1	EST_HUMAN	602183994F1 NIH_MGC_42 Homo sapiens cDNA clone IMAGE:4300174 5'
7573	20089	32965	1.78	1.0E-120	D34619.1	NT	Human TBXAS1 gene for thromboxane synthase, exon 7
7835	20377	33282	1.81	1.0E-120	Y00067.1	NT	Human gene for neurofilament subunit M (NF-M)
7835	20377	33283	1.81	1.0E-120	Y00067.1	NT	Human gene for neurofilament subunit M (NF-M)
8274	20815	33737	2.9	1.0E-120	BF337599.1	EST_HUMAN	602035352F1 NC1_CGAP_Bn64 Homo sapiens cDNA clone IMAGE:4183333 5'
8343	20884	33805	0.8	1.0E-120	AB033057.1	NT	Homo sapiens mRNA for KIAA1231 protein, partial cds
8343	20884	33806	0.8	1.0E-120	AB033057.1	NT	Homo sapiens mRNA for KIAA1231 protein, partial cds
8347	20888	33808	2.83	1.0E-120	AB007964.1	NT	Homo sapiens mRNA, chromosome 1 specific transcript KIAA0495
8347	20888	33809	2.83	1.0E-120	AB007964.1	NT	Homo sapiens mRNA, chromosome 1 specific transcript KIAA0495
8390	20930	33850	1.13	1.0E-120	AB007934.1	NT	Homo sapiens mRNA for KIAA0495 protein, partial cds
9421	21930	34877	4.6	1.0E-120	BE392102.1	EST_HUMAN	601307739F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3625544 5'
9421	21930	34878	4.6	1.0E-120	BE392102.1	EST_HUMAN	601307739F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3625544 5'
9660	22159	35131	3.07	1.0E-120	BF306541.1	EST_HUMAN	601888956F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4122876 5'
9675	22174	35150	8.09	1.0E-120	AU133205.1	EST_HUMAN	AU133205 NT2RP4 Homo sapiens cDNA clone NT2RP4001541 5'
9692	22191	35165	0.89	1.0E-120	AL049801.1	NT	Novel human gene mapping to chromosome 13, similar to rat RhoGAP
9988	22483	35469	2.88	1.0E-120	AB028000.1	NT	Homo sapiens mRNA for KIAA1077 protein, partial cds
11008	23520	36555	14.73	1.0E-120	BE298387.1	EST_HUMAN	601176727F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3532015 5'
11222	23753	36810	2.12	1.0E-120	BE867619.1	EST_HUMAN	601443135F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3847281 5'
11222	23753	36811	2.12	1.0E-120	BE867619.1	EST_HUMAN	601443135F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3847281 5'
11504	23953	37021	1.55	1.0E-120	U94774.1	NT	Human muscle glycogen phosphorylase (PYGM) gene, 5'UTR and exon 1
12153	24395	30975	1.31	1.0E-120	11417862	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
77	12754	25235	0.92	1.0E-121	Y18000.1	NT	Homo sapiens NF2 gene
401	13045	25536	1.68	1.0E-121	AU134963.1	EST_HUMAN	AU134963 PLACE1 Homo sapiens cDNA clone PLACE1000899 5'
753	15423	25867	1.19	1.0E-121	5032192	NT	Homo sapiens TNF receptor-associated factor 1 (TRAF1) mRNA
2008	14590	27150	0.98	1.0E-121	4755139	NT	Homo sapiens inositol polyphosphate 4-phosphatase, type I, 107kD (INPP4A), splice variant a, mRNA
2008	14590	27151	0.98	1.0E-121	4755139	NT	Homo sapiens inositol polyphosphate 4-phosphatase, type I, 107kD (INPP4A), splice variant a, mRNA
2150	14727	27300	1.74	1.0E-121	L76831.1	NT	Homo sapiens metabotropic glutamate receptor 1 beta (mGluR1beta) mRNA, complete cds
2696	15612	28092	1.03	1.0E-121	AF111168.2	NT	Homo sapiens serine palmitoyl transferase, subunit II gene, complete cds, and unknown genes

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3117	15731	28201	3.63	1.0E-121	Y19208.1	NT	Homo sapiens hrb3 gene for hair keratin, exons 1 to 9
3117	15731	28202	3.63	1.0E-121	Y19208.1	NT	Homo sapiens hrb3 gene for hair keratin, exons 1 to 9
3589	16193	28677	0.94	1.0E-121	AB037758.1	NT	Homo sapiens mRNA for KIAA1337 protein, partial cds
3589	16193	28678	0.94	1.0E-121	AB037758.1	NT	Homo sapiens mRNA for KIAA1337 protein, partial cds
3741	16342	28810	8.78	1.0E-121	AF155156.2	NT	Homo sapiens adaptor-related protein complex AP-4 epsilon subunit mRNA, complete cds
4424	17009	29452	1.42	1.0E-121	AI263294.1	EST_HUMAN	α57b01.x1 NCL_CGAP_Pen1 Homo sapiens cDNA clone IMAGE:2005417 3'
5112	17684	30120	3.54	1.0E-121	X91937.1	NT	H. sapiens ECE-1 gene (exon 17)
5472	18106	30425	1.02	1.0E-121	BE222250.1	EST_HUMAN	hu09f08.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3168119 3'
5750	18376	31086	0.69	1.0E-121	BE271424.1	EST_HUMAN	601140485F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3049820 5'
6968	19545		1.06	1.0E-121	A1271736.1	NT	Homo sapiens Xq pseudautosomal region; segment 2/2
7042	18082	30451	0.75	1.0E-121	AW989086.1	EST_HUMAN	RC3-NN0066-270400-011-402 NN0066 Homo sapiens cDNA
7042	18082	30452	0.75	1.0E-121	AW989086.1	EST_HUMAN	RC3-NN0066-270400-011-402 NN0066 Homo sapiens cDNA
7878	20420	33328	1.86	1.0E-121		NT	Homo sapiens gamma-aminobutyric acid (GABA) A receptor, alpha 2 (GABRA2), mRNA
7882	20424	33332	2.19	1.0E-121	D94122.1	NT	Homo sapiens DNA for prostacyclin synthase, exon 8
7882	20424	33333	2.19	1.0E-121	D94122.1	NT	Homo sapiens DNA for prostacyclin synthase, exon 8
9772	22270	35254	0.9	1.0E-121	AW583858.1	EST_HUMAN	ia05g05.y1 Human Pancreatic islets Homo sapiens cDNA 5' similar to TR:O75457 O75457 CYTOSOLIC PHOSPHOLIPASE A2-GAMMA.
9772	22270	35255	0.9	1.0E-121	AW583858.1	EST_HUMAN	ia05g05.y1 Human Pancreatic islets Homo sapiens cDNA 5' similar to TR:O75457 O75457 CYTOSOLIC PHOSPHOLIPASE A2-GAMMA.
10655	23187	36203	3.45	1.0E-121	11427788	NT	Homo sapiens COX11 (yeast) homolog, cytochrome c oxidase assembly protein (COX11), mRNA
10662	23194	36209	4.2	1.0E-121	AF084200.1	NT	Homo sapiens UDP-glucuronosyltransferase 2B4 precursor (UGT2B4) mRNA, UGT2B4*E458 allele, complete cds
10848	23369	36388	3.51	1.0E-121	7330334	NT	Homo sapiens chloride intracellular channel 4 like (CLIC4L), mRNA
10875	23396	36412	2.11	1.0E-121	N59624.1	EST_HUMAN	y74c01.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:248448 3'
289	12945	25430	1.68	1.0E-122	11526176	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1), mRNA
358	13007	25490	3.01	1.0E-122	AF114498.1	NT	Homo sapiens intersectin short isoform (ITSN) mRNA, complete cds
390	13027	25515	1.61	1.0E-122	11526176	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1), mRNA
915	13528	26047	5.29	1.0E-122	AF114498.1	NT	Homo sapiens intersectin short isoform (ITSN) mRNA, complete cds
1262	13859	26376	4.63	1.0E-122	M20707.1	NT	Human kappa-immunoglobulin germline pseudogene (Chr22:4) variable region (subgroup V kappa II)
1731	14322	26864	1.08	1.0E-122	AF167706.1	NT	Homo sapiens cysteine-rich repeat-containing protein S92 precursor, mRNA, complete cds
1750	14340	26887	1.8	1.0E-122	11418424	NT	Homo sapiens collagen, type XII, alpha 1 (COL12A1), mRNA
1750	14340	26888	1.8	1.0E-122	11418424	NT	Homo sapiens collagen, type XII, alpha 1 (COL12A1), mRNA
1850	14438	26895	6.15	1.0E-122	BE906024.1	EST_HUMAN	601497032F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3896358 5'

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2533	15097	27669	5.48	1.0E-122	BF316170.1	EST_HUMAN	601898173F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4125234 5'
2533	15097	27670	5.48	1.0E-122	BF316170.1	EST_HUMAN	601898173F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4125234 5'
2864	15483	27957	1.11	1.0E-122	AF264717.1	NT	Homo sapiens FYVE domain-containing dual specificity protein phosphatase FYVE-DSP2 mRNA, complete cds
4972	17546	29688	1.23	1.0E-122	4502168	NT	Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA
5127	17698		1.26	1.0E-122	AW504645.1	EST_HUMAN	UI-HF-BNO-all-a-03-Q-UJr1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3078948 5'
5752	18378	31089	1.36	1.0E-122	BE256039.1	EST_HUMAN	601113567F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3354232 5'
6853	18378	31089	6.96	1.0E-122	BE256039.1	EST_HUMAN	601113567F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3354232 5'
7266	18794	32850	0.68	1.0E-122	AA886871.1	EST_HUMAN	ak49h06.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1409339 3'
8731	21270	34189	0.55	1.0E-122	AJ276801.1	NT	Homo sapiens mRNA for doublesex and mab-3 related transcription factor 1 (DMRT1)
8858	21498	34419	1.37	1.0E-122	11424216	NT	Homo sapiens lethal giant larvae (Drosophila) homolog 2 (LLGL2), mRNA
9247	21773	34723	0.9	1.0E-122	AJ359618.1	EST_HUMAN	q32h07.x1 NCI_CGAP_Brn23 Homo sapiens cDNA clone IMAGE:2013757 3' similar to SW:MTA1_HUMAN Q13330 METASTASIS-ASSOCIATED PROTEIN MTA1.;
9247	21773	34724	0.9	1.0E-122	AJ359618.1	EST_HUMAN	q32h07.x1 NCI_CGAP_Brn23 Homo sapiens cDNA clone IMAGE:2013757 3' similar to SW:MTA1_HUMAN Q13330 METASTASIS-ASSOCIATED PROTEIN MTA1.;
10040	22535	35531	0.71	1.0E-122	AL117234.1	NT	Novel human gene mapping to chromosome X, isoform of dbl (proto-oncogene)
10666	23387	38402	1.55	1.0E-122	AW955834.1	EST_HUMAN	EST337604 IMAGE resequences, MAGD Homo sapiens cDNA
11738	24141		3.99	1.0E-122	11418187	NT	Homo sapiens phosphatidylserine phosphatase 1 (PMM1), mRNA
202	12863	25347	19.89	1.0E-123	U31519.1	NT	Human phosphoenolpyruvate carboxylase (PCK1) gene, promoter region and partial cds
800	13417	25921	2.06	1.0E-123	BF345274.1	EST_HUMAN	602018058F1 NCI_CGAP_Brn67 Homo sapiens cDNA clone IMAGE:4153670 5'
800	13417	25922	2.06	1.0E-123	BF345274.1	EST_HUMAN	602018058F1 NCI_CGAP_Brn67 Homo sapiens cDNA clone IMAGE:4153670 5'
1051	13658	26169	5.07	1.0E-123	AL163249.2	NT	Homo sapiens chromosome 21 segment HS21C049
1060	13665	26176	5.53	1.0E-123	5803114	NT	Homo sapiens inner membrane protein, mitochondrial (mitofilin) (IMMT), mRNA
1281	13876	26397	4.2	1.0E-123	4505818	NT	Homo sapiens phosphatidylinositol-4-phosphate 5-kinase, type II, beta (PIP5K2B) mRNA, and translated products
1281	13876	26398	4.2	1.0E-123	4505818	NT	Homo sapiens phosphatidylinositol-4-phosphate 5-kinase, type II, beta (PIP5K2B) mRNA, and translated products
2147	14724	27296	3.41	1.0E-123	M55419.1	NT	Human amelogenin (AMELY) gene, 3' end of cds
2147	14724	27297	3.41	1.0E-123	M55419.1	NT	Human amelogenin (AMELY) gene, 3' end of cds
2147	14724	27298	3.41	1.0E-123	M55419.1	NT	Human amelogenin (AMELY) gene, 3' end of cds
2354	14925		5.59	1.0E-123	7705962	NT	Homo sapiens RAB-like protein (LOC51209), mRNA
3288	15699	28378	0.67	1.0E-123	6912617	NT	Homo sapiens glutamyl-peptide cyclotransferase (glutamyl cyclase) (QPCT), mRNA
5638	18267	30739	1.6	1.0E-123	L34219.1	NT	Homo sapiens retinaldehyde-binding protein (RALBP) gene, complete cds

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5638	18267	30740	1.6	1.0E-123	L34219.1	NT	Homo sapiens retinaldehyde-binding protein (RALBP) gene, complete cds
5769	18395	31109	1.33	1.0E-123	BE799748.1	EST_HUMAN	601591108F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3945433 5'
6595	19192	31997	2.14	1.0E-123	AU118435.1	EST_HUMAN	AU118435 HEMBA1 Homo sapiens cDNA clone HEMBA1003591 5'
7076	19648	32486	0.71	1.0E-123	H53198.1	EST_HUMAN	y84403.r1 Soares fetal liver spleen 1NLS Homo sapiens cDNA clone IMAGE:202444 5' similar to SP:YAK1_YEAST P14680 PROTEIN KINASE YAK1:
7084	19655	32494	1.22	1.0E-123	U42224.1	NT	Human growth hormone releasing hormone gene, exon 7
7245	19774	32631	0.68	1.0E-123	U55258.1	NT	Human hBRAVO/Nr-CAM precursor (hBRAVO/Nr-CAM) gene, complete cds
7433	19957	32822	0.73	1.0E-123	11525833	NT	Homo sapiens heparan sulfate (glucosamine) 3-O-sulfotransferase 2 (HS3ST2), mRNA
7638	20150	33034	1.31	1.0E-123	11436439	NT	Homo sapiens 2'-5'-oligoadenylate synthetase 2 (OAS2), mRNA
7647	20159	33046	1.79	1.0E-123	BE263001.1	EST_HUMAN	601152815F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3508182 5'
7764	20272	33170	0.8	1.0E-123	N35841.1	EST_HUMAN	y86d11.r1 Soares melanocyte 2NbHM Homo sapiens cDNA clone IMAGE:268917 5' similar to PIR:S49611
7764	20272	33171	0.8	1.0E-123	N35841.1	EST_HUMAN	S49611 protein kinase PkpA - Phycorhizaceae blakesleeanus:
8472	21012		2.25	1.0E-123	AW371924.1	EST_HUMAN	y86d11.r1 Soares melanocyte 2NbHM Homo sapiens cDNA clone IMAGE:268917 5' similar to PIR:S49611
8261	21891	34838	2.04	1.0E-123	AB007823.1	NT	S49611 protein kinase PkpA - Phycorhizaceae blakesleeanus:
9424	21933	34882	39.79	1.0E-123	U09823.1	NT	RC4-BT0311-251199-012-607 BT0311 Homo sapiens cDNA
11567	24014	37083	5.42	1.0E-123	BF677292.1	EST_HUMAN	Homo sapiens mRNA for KIAA0454 protein, partial cds
11567	24014	37084	5.42	1.0E-123	BF677292.1	EST_HUMAN	Oryctolagus cuniculus New Zealand white elongation factor 1 alpha (Rabelfaz) mRNA, complete cds
280	12946	25431	0.93	1.0E-124	4507500	NT	60208679F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4250879 5'
280	12946	25432	0.93	1.0E-124	4507500	NT	60208679F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4250879 5'
286	12952		1.2	1.0E-124	D87675.1	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
511	13144	25630	2.28	1.0E-124	AL163246.2	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
720	13340	25829	4	1.0E-124	AA397551.1	EST_HUMAN	Homo sapiens DNA for amyloid precursor protein, complete cds
720	13340	25830	4	1.0E-124	AA397551.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C046
769	13407	25912	4.86	1.0E-124	AF155654.1	NT	z181b04.r1 Stralagene schizo brain S11 Homo sapiens cDNA clone IMAGE:728719 5' similar to TR:G300482
841	13457	25968	1.18	1.0E-124	4507500	NT	G300482 POL=REVERSE TRANSCRIPTASE HOMOLOG (RETROVIRAL ELEMENT):
837	13550	26066	5.09	1.0E-124	7705446	NT	z181b04.r1 Stralagene schizo brain S11 Homo sapiens cDNA clone IMAGE:728719 5' similar to TR:G300482
1358	13952	26479	0.62	1.0E-124	11419092	NT	G300482 POL=REVERSE TRANSCRIPTASE HOMOLOG (RETROVIRAL ELEMENT):
1391	13985	26511	6.15	1.0E-124	AF274892.1	NT	Human putative ribosomal protein S1 mRNA
1391	13985	26512	6.15	1.0E-124	AF274892.1	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
							Homo sapiens hypothetical protein (HSPC068), mRNA
							Homo sapiens ring finger protein (RNF), mRNA
							Homo sapiens glucose transporter 3 gene, exons 9, 10, and complete cds
							Homo sapiens glucose transporter 3 gene, exons 9, 10, and complete cds

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1851	14439	26986	3.15	1.0E-124	AJ17112.1	NT	Homo sapiens mRNA for nucleolar RNA-helicase (noh61 gene)
2107	14885	27253	1.73	1.0E-124	BE79524.1	EST_HUMAN	601491715F1 NIH_MGC_89 Homo sapiens cDNA clone IMAGE:3893954 5'
3537	16142	28624	0.72	1.0E-124	S78684.1	NT	Homo sapiens ATP-sensitive inwardly rectifying K-channel subunit (KCNJ6BIR1) gene, exon
3537	16142	28625	0.72	1.0E-124	S78684.1	NT	Homo sapiens ATP-sensitive inwardly rectifying K-channel subunit (KCNJ6BIR1) gene, exon
3987	16565	28034	0.66	1.0E-124	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
4150	16742	28198	0.8	1.0E-124	4504116	NT	Homo sapiens glutamate receptor, ionotropic, kainate 1 (GRIK1) mRNA
4855	17433	28884	2.18	1.0E-124	AB024068.1	NT	Homo sapiens gene for B120, exon 11
5088	17841		1.28	1.0E-124	M18178.1	NT	Human fibronectin gene extra type III repeat (EDII), exon x+1
5256	17819	30244	0.87	1.0E-124	AW963390.1	EST_HUMAN	EST375463 MAGe sequences, MAGH Homo sapiens cDNA
5501	18135	30545	10.59	1.0E-124	8922337	NT	Homo sapiens hypothetical protein FLJ10300, mRNA
5852	18478	31198	1.05	1.0E-124	4508788	NT	Homo sapiens IQ motif containing GTPase activating protein 1 (IQGAP1) mRNA
6048	18687	31408	6.57	1.0E-124	BF686135.1	EST_HUMAN	602124944F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4281635 5'
6317	18924	31701	0.88	1.0E-124	AV711283.1	EST_HUMAN	AV711283 Cu Homo sapiens cDNA clone CuaADF07 5'
6583	19161	31959	0.9	1.0E-124	11420854	NT	Homo sapiens ubiquitin specific protease 9, X chromosome (Drosophila fat facets related) (USP9X), mRNA
7083	19654	32493	3.45	1.0E-124	Y11717.1	NT	M.musculus mRNA for hoxa3 gene
7191	19723	32571	1.23	1.0E-124	BE271295.1	EST_HUMAN	800943771F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:2866585 5'
7191	19723	32572	1.23	1.0E-124	BE271295.1	EST_HUMAN	800943771F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:2866585 5'
7555	20074	32950	1.15	1.0E-124	AA630331.1	EST_HUMAN	ec08h05.s1 Stratagene HeLa cell s3 937218 Homo sapiens cDNA clone IMAGE:855897 3'
8201	20742	33855	18.99	1.0E-124	4508654	NT	Homo sapiens ribosomal protein L5 (RPL5) mRNA
8399	20939	33861	1.45	1.0E-124	AW612108.1	EST_HUMAN	hg94a09.x1 NCI CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2853240 3' similar to TR:Q85182
8399	20939	33862	1.45	1.0E-124	AW612108.1	EST_HUMAN	O95182 PEROXISOMAL SHORT-CHAIN ALCOHOL DEHYDROGENASE ;
9089	21825	34560	1.42	1.0E-124	A1798894.1	EST_HUMAN	hg94a08.x1 NCI CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2953240 3' similar to TR:Q85182
9089	21825	34561	1.42	1.0E-124	A1798894.1	EST_HUMAN	wc43g03.x1 NCI CGAP_P128 Homo sapiens cDNA clone IMAGE:2321428 3'
9411	21920	34868	2.52	1.0E-124	AV645633.1	EST_HUMAN	wc43g03.x1 NCI CGAP_P128 Homo sapiens cDNA clone IMAGE:2321428 3'
9411	21920	34869	2.52	1.0E-124	AV645633.1	EST_HUMAN	AV645633 GLC Homo sapiens cDNA clone GLCACE04 3'
9498	21988	34954	1.14	1.0E-124	AF022655.1	NT	AV645633 GLC Homo sapiens cDNA clone GLCACE04 3'
9498	21988	34955	1.14	1.0E-124	AF022655.1	NT	Homo sapiens cap250 centrosome associated protein mRNA, complete cds
9528	22028	34884	8.22	1.0E-124	A1767133.1	EST_HUMAN	Homo sapiens cap250 centrosome associated protein mRNA, complete cds
9528	22028	34885	8.22	1.0E-124	A1767133.1	EST_HUMAN	wf93f02.x1 NCI CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2400891 3'
9785	22283	35289	1.68	1.0E-124	AW503755.1	EST_HUMAN	wf93f02.x1 NCI CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2400891 3'
11213	23718	36770	3.81	1.0E-124	AW665663.1	EST_HUMAN	UHF-BN0-akz-b-04-0-UJr1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3078848 5'
							h05c06.x1 Scars_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2880808 3'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11347	23045	36056	2.26	1.0E-124	A1448455.1	EST_HUMAN	t19e03.xt.NCL.CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2141980 3' similar to TR:O31662 O31662 YKRS PROTEIN. ;
11347	23045	36057	2.26	1.0E-124	A1448455.1	EST_HUMAN	t19e03.xt.NCL.CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2141980 3' similar to TR:O31662 O31662 YKRS PROTEIN. ;
11818	13340	25829	6.1	1.0E-124	AA397551.1	EST_HUMAN	z81b04.r1 Stratagene schizo brain S11 Homo sapiens cDNA clone IMAGE:728719 5' similar to TR:G300482 G300482 POL=REVERSE TRANSCRIPTASE HOMOLOG (RETROVIRAL ELEMENT) ;
11818	13340	25830	6.1	1.0E-124	AA397551.1	EST_HUMAN	z81b04.r1 Stratagene schizo brain S11 Homo sapiens cDNA clone IMAGE:728719 5' similar to TR:G300482 G300482 POL=REVERSE TRANSCRIPTASE HOMOLOG (RETROVIRAL ELEMENT) ;
12284	24474	30834	1.28	1.0E-124	AB029016.1	NT	Homo sapiens mRNA for KIAA1093 protein, partial cds
12542	24900	30832	2.42	1.0E-124	11417862	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
12542	24900	30833	2.42	1.0E-124	11417862	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
341	12993		8.05	1.0E-125	AB032998.1	NT	Homo sapiens mRNA for KIAA1172 protein, partial cds
451	12680	25136	3.95	1.0E-125	BE743922.1	EST_HUMAN	601577981F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3926885 5'
672	13296	25777	23.21	1.0E-125	A1110656.1	EST_HUMAN	HA0086 Human fetal liver cDNA library Homo sapiens cDNA
672	13296	25778	23.21	1.0E-125	A1110656.1	EST_HUMAN	HA0086 Human fetal liver cDNA library Homo sapiens cDNA
757	13376	25871	1.7	1.0E-125	AF264750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
893	13507	26025	2.68	1.0E-125	AA042813.1	EST_HUMAN	gb:X65857_cds1 OLFACTORY RECEPTOR-LIKE PROTEIN HGMP07E (HUMAN);
1036	13646	26158	2.18	1.0E-125	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
1193	13794	26303	1.9	1.0E-125	7662279	NT	Homo sapiens KIAA0744 gene product; histone deacetylase 7 (KIAA0744), mRNA
1712	15448	26842	1.65	1.0E-125	7661867	NT	Homo sapiens KIAA0022 gene product (KIAA0022), mRNA
1836	14424	26975	0.96	1.0E-125	U78027.1	NT	Homo sapiens Bruton's tyrosine kinase (BTK), alpha-D-galactosidase A (GLA), L44-like ribosomal protein (L44L) and FTP3 (FTP3) genes, complete cds
1847	14435	26991	2.28	1.0E-125	AF015450.1	NT	Homo sapiens Usurpin-alpha mRNA, complete cds
1847	14435	26992	2.28	1.0E-125	AF015450.1	NT	Homo sapiens Usurpin-alpha mRNA, complete cds
2397	14965	27538	1.03	1.0E-125	AA011278.1	EST_HUMAN	z01g09.r1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:429568 5'
2632	15193	27764	1.06	1.0E-125	4504696	NT	Homo sapiens inhibin, alpha (INHFA) mRNA
2632	15193	27765	1.06	1.0E-125	4504696	NT	Homo sapiens inhibin, alpha (INHFA) mRNA
3925	16523	28991	1.59	1.0E-125	AA042813.1	EST_HUMAN	gb:X65857_cds1 OLFACTORY RECEPTOR-LIKE PROTEIN HGMP07E (HUMAN);
4648	17230	29686	2.78	1.0E-125	11425114	NT	Homo sapiens zinc finger protein ZNF287 (ZNF287), mRNA
4648	17230	29687	2.78	1.0E-125	11425114	NT	Homo sapiens zinc finger protein ZNF287 (ZNF287), mRNA
4724	17305	29749	1.54	1.0E-125	BE315412.1	EST_HUMAN	601141152F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3140786 5'
5932	18554	31261	0.69	1.0E-125	BF683945.1	EST_HUMAN	602138874F1 NIH_MGC_48 Homo sapiens cDNA clone IMAGE:4300770 5'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6033	18652	31394	1.55	1.0E-125	11438448	NT	Homo sapiens KIAA0885 protein (KIAA0885), mRNA
6052	18670	31409	1.18	1.0E-125	BE175169.1	EST_HUMAN	QV2-HT0577-010500-165-b06 HT0577 Homo sapiens cDNA
6089	18705	31453	3.2	1.0E-125	BE892660.1	EST_HUMAN	601433472F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3918852 5'
6129	18744	31497	0.75	1.0E-125	AI679904.1	EST_HUMAN	tu07607.x1 NCI_CGAP_Gae4 Homo sapiens cDNA clone IMAGE:2256108 3' similar to W.P.C45G9.2 CE01854
6695	19291	32094	1.55	1.0E-125	BE562526.1	EST_HUMAN	601335826F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3688760 5'
6695	19291	32095	1.55	1.0E-125	BE562526.1	EST_HUMAN	601335826F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3688760 5'
7121	19461	32277	65.83	1.0E-125	X03427.1	NT	Homo sapiens IGF-II gene, exon 5
7121	19461	32278	65.83	1.0E-125	X03427.1	NT	Homo sapiens IGF-II gene, exon 5
7538	20058	32932	0.75	1.0E-125	BE278823.1	EST_HUMAN	601159076F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3505603 5'
8483	21022	33938	1	1.0E-125	U90288.1	NT	Human chromosome 10 duplicated adrenoleukodystrophy (ALD) gene segment containing exons 8-10
8483	21022	33939	1	1.0E-125	U90288.1	NT	Human chromosome 10 duplicated adrenoleukodystrophy (ALD) gene segment containing exons 8-10
9046	21583	34512	9.65	1.0E-125	BE181640.1	EST_HUMAN	QV1-HT0638-070500-191-d12 HT0638 Homo sapiens cDNA
9046	21583	34513	9.65	1.0E-125	BE181640.1	EST_HUMAN	QV1-HT0638-070500-191-d12 HT0638 Homo sapiens cDNA
9303	21903	34852	1.05	1.0E-125	AI585988.1	EST_HUMAN	ts2603.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2171881 3' similar to TR:Q14089 Q14089 HYPOTHETICAL PROTEIN;
10350	22844	35839	0.53	1.0E-125	BE794578.1	EST_HUMAN	601590345F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3944631 5'
10388	22882	35976	0.73	1.0E-125	AB002298.1	NT	Human mRNA for KIAA0300 gene, partial cds
10562	23098	36112	3.76	1.0E-125	AF043458.1	NT	Homo sapiens I-REL gene, exon 5
11016	23530	36566	4.05	1.0E-125	AB014567.1	NT	Homo sapiens mRNA for KIAA0667 protein, partial cds
11169	23676	36722	1.56	1.0E-125	AB014567.1	NT	Homo sapiens myosin, heavy polypeptide 1, skeletal muscle, adult (MYH1), mRNA
11174	23681	36727	6.41	1.0E-125	AF026029.1	NT	Homo sapiens poly(A) binding protein II (PABP2) gene, complete cds
11279	23732	36787	2.99	1.0E-125	AV812899.1	EST_HUMAN	RC3-ST0186-250200-018-c11 ST0186 Homo sapiens cDNA
11378	23827	36888	6.08	1.0E-125	BE074267.1	EST_HUMAN	QV3-BT0569-020200-075-g08 BT0569 Homo sapiens cDNA
11375	23827	36889	6.08	1.0E-125	BE074267.1	EST_HUMAN	QV3-BT0569-020200-075-g08 BT0569 Homo sapiens cDNA
808	13423	25929	3.44	1.0E-126	4758007	NT	Homo sapiens CDC-like kinase (CLK) mRNA
809	13428	25932	1.92	1.0E-126	M61936.1	NT	Human laminin B1 chain gene, exon 20
952	13564	26076	295	1.0E-126	X68735.1	NT	H. sapiens gene for alpha1-antichymotrypsin, exon 3
3108	15723	28194	9.08	1.0E-126	AA160709.1	EST_HUMAN	zo72c03.r1 Stralagene pancreas (#937208) Homo sapiens cDNA clone IMAGE:592420 5'
3108	15723	28195	9.08	1.0E-126	AA160709.1	EST_HUMAN	zo72c03.r1 Stralagene pancreas (#937208) Homo sapiens cDNA clone IMAGE:592420 5'
3691	18282	28761	0.98	1.0E-126	X53941.1	NT	H. sapiens DNA for liver cytochrome b5 pseudogene
3716	18317	28785	2.02	1.0E-126	7657038	NT	Homo sapiens death receptor 6 (DR6), mRNA

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4902	17477	29933	1.03	1.0E-126	AF101108.1	NT	Homo sapiens collagen type XI alpha-1 (COL11A1) gene, exon 63
4902	17477	29934	1.03	1.0E-126	AF101108.1	NT	Homo sapiens collagen type XI alpha-1 (COL11A1) gene, exon 63
4961	17536	29978	1.31	1.0E-126	N34078.1	EST_HUMAN	yx76c06.r1 Soares melanocyte 2NbHM Homo sapiens cDNA clone IMAGE:267850 5'
6380	18984	31764	3.46	1.0E-126	AA460075.1	EST_HUMAN	zx66e03.r1 Soares total fetus Nb2HF8 9w Homo sapiens cDNA clone IMAGE:798444 5' similar to
6432	19035	31820	4.2	1.0E-126	AB040958.1	NT	TR.G1145880 G1145880 TTIN
6432	19035	31821	4.2	1.0E-126	AB040958.1	NT	Homo sapiens mRNA for KIAA1525 protein, partial cds
7511	20032	32897	0.85	1.0E-126	AF257737.1	NT	Homo sapiens mRNA for KIAA1525 protein, partial cds
7511	20032	32898	0.85	1.0E-126	AF257737.1	NT	Homo sapiens ciliary dynein heavy chain 9 (DNAH9) mRNA, complete cds
7819	20361	33267	0.92	1.0E-126	AB037715.1	NT	Homo sapiens ciliary dynein heavy chain 9 (DNAH9) mRNA, complete cds
7819	20361	33268	0.92	1.0E-126	AB037715.1	NT	Homo sapiens mRNA for KIAA1294 protein, partial cds
7929	20471	33380	5.78	1.0E-126	X16609.1	NT	Homo sapiens mRNA for KIAA1294 protein, partial cds
						NT	Human mRNA for ankyrin (variant 2.1)
8124	20665	33575	0.85	1.0E-126	AA483388.1	EST_HUMAN	ne74b12.s1 NCI_CGAP_Ew1 Homo sapiens cDNA clone IMAGE:909983 similar to SW:TS06_HUMAN
9711	22209	35181	0.52	1.0E-126	4503424	NT	P98066 TUMOR NECROSIS FACTOR-INDUCIBLE PROTEIN TSG-6 PRECURSOR
10672	23204	36217	1.73	1.0E-126	M93196.1	NT	Homo sapiens neuro-oncological ventral antigen 1 (NOVA1), splice variant 1, mRNA
10738	23263	36278	3.69	1.0E-126	BF683175.1	EST_HUMAN	Human macrophage mannose receptor (MRC1) gene, exon 5
11392	23844	36908	2.32	1.0E-126	BE261660.1	EST_HUMAN	602139138F1 NIH_MGC_46 Homo sapiens cDNA clone IMAGE:4288240 5'
11636	16292	28761	2.52	1.0E-126	X53941.1	NT	601149404F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3502128 5'
12304	18036	30496	6.76	1.0E-126	BE743922.1	EST_HUMAN	H. sapiens DNA for liver cytochrome b5 pseudogene
183	12845	25330	4.5	1.0E-127	AB024597.1	NT	601577981F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3926685 5'
183	12845	25331	4.5	1.0E-127	AB024597.1	NT	Homo sapiens mRNA for casein kinase I epsilon, complete cds
184	12845	25330	2.76	1.0E-127	AB024597.1	NT	Homo sapiens mRNA for casein kinase I epsilon, complete cds
184	12845	25331	2.76	1.0E-127	AB024597.1	NT	Homo sapiens mRNA for casein kinase I epsilon, complete cds
295	12951	25439	1.3	1.0E-127	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
295	12951	25440	1.3	1.0E-127	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
914	13527	26046	2.22	1.0E-127	AF114488.1	NT	Homo sapiens interseitin short isoform (ITSN) mRNA, complete cds
949	13561	26075	1.37	1.0E-127	U72621.2	NT	Homo sapiens lost on transformation LOT1 mRNA, complete cds
1729	14320	26862	1.33	1.0E-127	4827053	NT	Homo sapiens ubiquitin specific protease 8 (USP8) mRNA
						NT	Homo sapiens leukocyte immunoglobulin-like receptor, subfamily A (with TM domain), member 1 (LILRA1), mRNA
2111	14689	27256	2.81	1.0E-127	5803065	NT	Homo sapiens leukocyte immunoglobulin-like receptor, subfamily A (with TM domain), member 1 (LILRA1), mRNA
2111	14689	27257	2.81	1.0E-127	5803065	NT	Homo sapiens leukocyte immunoglobulin-like receptor, subfamily A (with TM domain), member 1 (LILRA1), mRNA

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Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2241	14816	27389	5.62	1.0E-127	4506820	NT	Homo sapiens ribosomal protein L28 (RPL28) mRNA
2381	14950	27523	3.29	1.0E-127	AF245505.1	NT	Homo sapiens adican mRNA, complete cds
2640	15198	27773	5.29	1.0E-127	X12881.1	NT	Human mRNA for cytokerin 18
3753	16354	28822	1.02	1.0E-127	AF114488.1	NT	Homo sapiens intersectin short isoform (ITSN) mRNA, complete cds
							au80606.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2782594 5' similar to TR:Q15170 Q15170 TRANSCRIPTION FACTOR S-II-RELATED PROTEIN :contains element MER22 repetitive element :
3884	16482	28944	0.75	1.0E-127	AW161297.1	EST_HUMAN	Homo sapiens delayed rectifier potassium channel subunit Isk mRNA, complete cds
4194	16783	29232	0.66	1.0E-127	AF135198.1	NT	Homo sapiens chromosome 21 segment HS21C047
4303	16889	29332	0.61	1.0E-127	AL163247.2	NT	Homo sapiens neuroblastome-amplified protein (LOC51594), mRNA
4340	16927	29367	21.24	1.0E-127	7706239	NT	Homo sapiens neuroblastome-amplified protein (LOC51594), mRNA
4340	16927	29368	21.24	1.0E-127	7706239	NT	Homo sapiens neuroblastome-amplified protein (LOC51594), mRNA
4595	17178	29626	0.68	1.0E-127	AF252297.1	NT	Homo sapiens cytochrome P450 retinoid metabolizing protein P450RAI-2 mRNA, complete cds
4708	17290	29734	5.02	1.0E-127	4506384	NT	Homo sapiens RAD1 (S. pombe) homolog (RAD1) mRNA, and translated products
4738	17319		2.84	1.0E-127	AL163288.2	NT	Homo sapiens chromosome 21 segment HS21C068
4780	17361	29811	1.04	1.0E-127	6912639	NT	Homo sapiens Ring1 and YY1 binding protein (RYBP), mRNA
							z01a10.1 Soares melanocyte 2NblHM Homo sapiens cDNA clone IMAGE:291258 5' similar to SW:PIP6_RAT P10888 1-PHOSPHATIDYLINOSITOL-4,5-BISPHOSPHATE PHOSPHODIESTERASE DELTA 1:
5884	18506	31232	2.37	1.0E-127	W03547.1	EST_HUMAN	Homo sapiens neuronal cell adhesion molecule (NRCAM) mRNA
5912	18534	31260	0.86	1.0E-127	4826863	NT	H. sapiens NOS2 gene, exon 6
5970	18591	31326	4.61	1.0E-127	X85764.1	NT	H. sapiens TCF11 gene, exon 3-6
6310	18917	31691	2.21	1.0E-127	X84080.1	NT	Homo sapiens Integrin, beta 8 (ITGB8) mRNA
6463	19064	31849	5.89	1.0E-127	4504778	NT	Homo sapiens immunoglobulin superfamily, member 3 (IGSF3), mRNA
6764	19357	32168	0.93	1.0E-127	11421595	NT	Homo sapiens reelin (RELN) mRNA
7122	19462	32279	0.85	1.0E-127	4826877	NT	Homo sapiens Pendred syndrome (PDS), mRNA
7760	20288	33165	1.31	1.0E-127	11421914	NT	Homo sapiens Pendred syndrome (PDS), mRNA
7760	20288	33166	1.31	1.0E-127	11421914	NT	Homo sapiens Pendred syndrome (PDS), mRNA
7763	20271	33169	0.67	1.0E-127	BF671355.1	EST_HUMAN	602151232F1 NIH_MGC 81 Homo sapiens cDNA clone IMAGE:4292575 5'
8920	21359	34285	0.7	1.0E-127	11427235	NT	Homo sapiens Chediak-Higashi syndrome 1 (CHS1), mRNA
8920	21359	34286	0.7	1.0E-127	11427235	NT	Homo sapiens Chediak-Higashi syndrome 1 (CHS1), mRNA
							Homo sapiens secretory pathway component Sec31B-1 mRNA, alternatively spliced, complete cds
9558	22058	35019	4.96	1.0E-127	AF274863.1	NT	Homo sapiens secretory pathway component Sec31B-1 mRNA, alternatively spliced, complete cds
9558	22058	35020	4.96	1.0E-127	AF274863.1	NT	Homo sapiens secretory pathway component Sec31B-1 mRNA, alternatively spliced, complete cds
8787	22285	35270	0.66	1.0E-127	AI298932.1	EST_HUMAN	qm94H08 x1 NC1 CGAP Lu5 Homo sapiens cDNA clone IMAGE:1896449 3'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10245	22740	35730	2.25	1.0E-127	11427235	NT	Homo sapiens Chediak-Higashi syndrome 1 (CHS1), mRNA
11037	23551	36585	6.54	1.0E-127	11417339	NT	Homo sapiens similar to heat shock 70kD protein 9B (mortalin-2) (H. sapiens) (LOC63184), mRNA
11037	23551	36586	6.54	1.0E-127	11417339	NT	Homo sapiens similar to heat shock 70kD protein 9B (mortalin-2) (H. sapiens) (LOC63184), mRNA
11490	23939	37009	1.9	1.0E-127	BE895415.1	EST_HUMAN	601434784F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3919917 5'
11490	23939	37010	1.9	1.0E-127	BE895415.1	EST_HUMAN	601434784F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3919917 5'
12046	12845	25330	1.43	1.0E-127	AB024597.1	NT	Homo sapiens mRNA for casein kinase I epsilon, complete cds
12046	12845	25331	1.43	1.0E-127	AB024597.1	NT	Homo sapiens mRNA for casein kinase I epsilon, complete cds
12253	24464	30982	1.7	1.0E-127	AB011399.1	NT	Homo sapiens gene for AF-6, complete cds
12820	24967		2.23	1.0E-127	AB011399.1	NT	Homo sapiens gene for AF-6, complete cds
485	13118	25605	2.44	1.0E-128	BE389617.1	EST_HUMAN	601278127F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3618822 5'
1195	13796	26305	1	1.0E-128	4758081	NT	Homo sapiens chondroitin sulfate proteoglycan 2 (versican) (CSPG2) mRNA
1195	13796	26306	1	1.0E-128	4758081	NT	Homo sapiens chondroitin sulfate proteoglycan 2 (versican) (CSPG2) mRNA
2115	14693	27260	4.14	1.0E-128	U02523.1	NT	Human FAU1P pseudogene, trinucleotide repeat regions
2115	14693	27261	4.14	1.0E-128	U02523.1	NT	Human FAU1P pseudogene, trinucleotide repeat regions
2250	14824	27400	18.53	1.0E-128	4508718	NT	Homo sapiens ribosomal protein S2 (RPS2) mRNA
3441	18049	28527	1.14	1.0E-128	AB033073.1	NT	Homo sapiens mRNA for KIAA1247 protein, partial cds
4771	17352	28804	5.43	1.0E-128	11426673	NT	Homo sapiens prospero-related homeobox 1 (PROX1), mRNA
5734	18360	31066	6.97	1.0E-128	X69539.1	NT	H sapiens gene for inter-alpha-trypsin inhibitor heavy chain H1, exon 12
6550	19148	31944	2.08	1.0E-128	11420965	NT	Homo sapiens phosphodiesterase 1C, calmodulin-dependent (70kD) (PDE1C), mRNA
7010	19508	32328	8.01	1.0E-128	BF224345.1	EST_HUMAN	7q86b10.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE: 3'
8206	20747	33659	0.75	1.0E-128	AB037816.1	NT	Homo sapiens mRNA for KIAA1395 protein, partial cds
8206	20747	33660	0.75	1.0E-128	AB037816.1	NT	Homo sapiens mRNA for KIAA1395 protein, partial cds
10043	22538	35535	1.62	1.0E-128	AA639198.1	EST_HUMAN	ns04a11.r1 NCI_CGAP_Ew1 Homo sapiens cDNA clone IMAGE:1182620 similar to Tr:G951338 G951338
10588	23123	36137	5.48	1.0E-128	11425254	NT	CHROMOSOME SEGREGATION GENE HOMOLOG CAS. ;
10597	23131	36145	5.15	1.0E-128	AA928959.1	EST_HUMAN	Homo sapiens glutamate receptor, ionotropic, N-methyl D-aspartate 2D (GRIN2D), mRNA
11905	24244		4.37	1.0E-128	AW955290.1	EST_HUMAN	om68h08.s1 NCI_CGAP_GC4 Homo sapiens cDNA clone IMAGE:1552383 3' similar to gb:X54941 CYCLIN-DEPENDENT KINASE REGULATORY SUBUNIT 1 (HUMAN);
127	13071	25568	12.06	1.0E-129	S37722.1	NT	EST397360 MAGE sequences, MAGE Homo sapiens cDNA
438	13071	25568	14.64	1.0E-129	S37722.1	NT	insulin-like growth factor binding protein-2 [human, placenta, Genomic, 1019 nt, segment 2 of 4]
1756	14348	26891	2.48	1.0E-129	AL096890.1	NT	insulin-like growth factor binding protein-2 [human, placenta, Genomic, 1019 nt, segment 2 of 4]
1761	14351	26896	1.62	1.0E-129	AF240786.1	NT	Novel human mRNA containing Zinc finger C2H2 type domains
							Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1761	14351	26887	1.62	1.0E-129	AF240786.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
1868	14471	27029	2.2	1.0E-129	11418522	NT	Homo sapiens zinc finger protein 76 (expressed in testis) (ZNF76), mRNA
3162	15776	28244	1.41	1.0E-129	Q14585	SWISSPROT	ZINC FINGER PROTEIN HZF10
3162	15776	28245	1.41	1.0E-129	Q14585	SWISSPROT	ZINC FINGER PROTEIN HZF10
3162	15776	28246	1.41	1.0E-129	Q14585	SWISSPROT	ZINC FINGER PROTEIN HZF10
4244	16632	29283	1.95	1.0E-129	AB040892.1	NT	Homo sapiens mRNA for KIAA1459 protein, partial cds
4367	16954	29394	2.57	1.0E-129	AW755254.1	EST_HUMAN	CMYA5 Human cardiac muscle expression library Homo sapiens cDNA clone 4151935 similar to CMYA5 Cardiomypathy associated gene 5
4367	16954	29395	2.57	1.0E-129	AW755254.1	EST_HUMAN	CMYA5 Human cardiac muscle expression library Homo sapiens cDNA clone 4151935 similar to CMYA5 Cardiomypathy associated gene 5
6241	18650	31620	4.78	1.0E-129	AJ006345.1	NT	Homo sapiens KVLQT1 gene
7181	19713	32661	4.38	1.0E-129	AJ006345.1	NT	Homo sapiens KVLQT1 gene
7241	19770	32626	14.44	1.0E-129	11420850	NT	Homo sapiens similar to ribosomal protein S26 (H. sapiens) (LOC63694), mRNA
7535	20055	32928	0.78	1.0E-129	AF041056.1	NT	Homo sapiens WSCR4 gene, exons 3 and 4
7535	20055	32929	0.78	1.0E-129	AF041056.1	NT	Homo sapiens WSCR4 gene, exons 3 and 4
8260	20801		3.93	1.0E-129	AB014534.1	NT	Homo sapiens mRNA for KIAA0634 protein, partial cds
9991	22488	35473	1.16	1.0E-129	11437282	NT	Homo sapiens solute carrier family 21 (organic anion transporter), member 9 (SLC21A9), mRNA
9991	22488	35474	1.16	1.0E-129	11437282	NT	Homo sapiens solute carrier family 21 (organic anion transporter), member 9 (SLC21A9), mRNA
11102	23812	36652	3.34	1.0E-129	AA825526.1	EST_HUMAN	af7207.r1 Soares_NIHMPu_S1 Homo sapiens cDNA clone IMAGE:1047589 5'
11177	19770	32626	11.7	1.0E-129	11420850	NT	Homo sapiens similar to ribosomal protein S26 (H. sapiens) (LOC63694), mRNA
11892	24235		2.32	1.0E-129	H83155.1	EST_HUMAN	yq49c05.r1 Soares fetal liver spleen 1NLS Homo sapiens cDNA clone IMAGE:199112 5' similar to SP-B48150 B48150 HP-25=HIBERNATION-RELATED PROTEIN - TAMIAS ASIATICUS=ASIAN :
12287	24494		2.07	1.0E-129	AL120739.1	EST_HUMAN	DKFZp762K171_r1 762 (synonym: hmd2) Homo sapiens cDNA clone IMAGE:3346366 5'
80	12757	25239	1.85	1.0E-130	7705530	NT	Homo sapiens hypothetical protein (HSPC242), mRNA
1212	13812	26328	1.23	1.0E-130	AB037835.1	NT	Homo sapiens mRNA for KIAA1414 protein, partial cds
1706	14298	26836	8.52	1.0E-130	BE275192.1	EST_HUMAN	601121895F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3346366 5'
1706	14298	26837	8.52	1.0E-130	BE275192.1	EST_HUMAN	601121895F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3346366 5'
2027	14609		4.6	1.0E-130	X04092.1	NT	Human gene for catalase (EC 1.11.1.6) exon 9 mapping to chromosome 11, band p13
2127	14705		1.69	1.0E-130	8394394	NT	Homo sapiens candidate taste receptor T2R16 (T2R16), mRNA
2799	15351		7.47	1.0E-130	AJ010230.1	NT	Homo sapiens RET finger protein-like 1 antisense transcript, partial
2903	15520	27989	1.17	1.0E-130	BE564219.1	EST_HUMAN	601343016F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3685466 5'
2903	15520	27990	1.17	1.0E-130	BE564219.1	EST_HUMAN	601343016F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3685466 5'
3637	16240	28716	0.96	1.0E-130	AF240698.1	NT	Homo sapiens retinol dehydrogenase homolog isoform-1 (RDH) mRNA, complete cds

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3831	15520	27989	5.82	1.0E-130	BE564219.1	EST_HUMAN	601343016F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3685486 5'
3831	15520	27990	5.82	1.0E-130	BE564219.1	EST_HUMAN	601343016F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3685486 5'
4010	16608	29081	1.56	1.0E-130	AW503580.1	EST_HUMAN	U1-HF-BNO-aky-g-06-0-U1.r1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3078731 5'
4147	16739	29192	1.18	1.0E-130	M97710.1	NT	Human T-cell receptor (V alpha 22.1, J alpha RPI/4265-variant, C alpha 1) mRNA
4636	17219	29672	9	1.0E-130	AW843983.1	EST_HUMAN	GMA-CN0045-180200-511-02 CN0045 Homo sapiens cDNA
5258	17821	30246	1.11	1.0E-130	AW363299.1	EST_HUMAN	RCO-CT0318-201199-031-a11 CT0318 Homo sapiens cDNA
5258	17821	30247	1.11	1.0E-130	AW363299.1	EST_HUMAN	RCO-CT0318-201199-031-a11 CT0318 Homo sapiens cDNA
6910	19569	32396	0.74	1.0E-130	AW843875.1	EST_HUMAN	CMO-CN0045-170200-225-g03 CN0045 Homo sapiens cDNA
6910	19569	32397	0.74	1.0E-130	AW843875.1	EST_HUMAN	CMO-CN0045-170200-225-g03 CN0045 Homo sapiens cDNA
6923	19582	32411	0.7	1.0E-130	11425448	NT	Homo sapiens estrogen-responsive B box protein (EBBP), mRNA
7301	19829	32687	2.1	1.0E-130	11416777	NT	Homo sapiens solute carrier family 6 (neurotransmitter transporter, L-proline), member 7 (SLC6A7), mRNA
8616	21155	34212	0.98	1.0E-130	AF008551.1	NT	Homo sapiens aurora-related kinase 1 (ARK1) mRNA, complete cds
8753	21292	34212	4.06	1.0E-130	AW956242.1	EST_HUMAN	EST368312 MAGE resequences, MAGD Homo sapiens cDNA
9141	21676	34619	1.97	1.0E-130	AB037756.1	NT	Homo sapiens mRNA for KIAA1335 protein, partial cds
9846	22344		0.78	1.0E-130	AW103454.1	EST_HUMAN	xd36e06.x1 NCI_CGAP_Ov23 Homo sapiens cDNA clone IMAGE:2595874 3'
4	12684	25140	2.27	0.0E+00	AA228126.1	EST_HUMAN	G222811 ALPHA 1 CHAIN OF TYPE XII COLLAGEN. ;
4	12684	25141	2.27	0.0E+00	AA228126.1	EST_HUMAN	G222811 ALPHA 1 CHAIN OF TYPE XII COLLAGEN. ;
8	12687	25145	1.56	0.0E+00	4885136	NT	Homo sapiens checkpoint suppressor 1 (CHES1), mRNA
17	12686	25152	2.85	0.0E+00	8923349	NT	Homo sapiens hypothetical protein FLJ20371 (FLJ20371), mRNA
17	12686	25153	2.85	0.0E+00	8923349	NT	Homo sapiens hypothetical protein FLJ20371 (FLJ20371), mRNA
24	12703	25160	4.29	0.0E+00	D83327.1	NT	Homo sapiens DCRR1 mRNA, partial cds
24	12703	25161	4.29	0.0E+00	D83327.1	NT	Homo sapiens DCRR1 mRNA, partial cds
29	12708	25166	30.44	0.0E+00	AF141349.1	NT	Homo sapiens beta-tubulin mRNA, complete cds
37	12716	25175	38.86	0.0E+00	5802997	NT	Homo sapiens Cdc42 effector protein 2 (CEP2), mRNA
39	12718	25178	23.21	0.0E+00	M58600.1	NT	Human heparin cofactor II (HCF2) gene, exons 1 through 5
42	12721	25182	7.78	0.0E+00	M58600.1	NT	Human heparin cofactor II (HCF2) gene, exons 1 through 5
44	12723	25184	4.41	0.0E+00	6857825	NT	Homo sapiens RNA-binding protein S1, serine-rich domain (RNPS1), mRNA
61	12740	25211	8.23	0.0E+00	Y17151.2	NT	Homo sapiens mRNA for multidrug resistance protein 3 (ABCC3)
61	12740	25212	8.23	0.0E+00	Y17151.2	NT	Homo sapiens mRNA for multidrug resistance protein 3 (ABCC3)
63	12742	25216	1	0.0E+00	D78804.1	EST_HUMAN	HUM516H08B Human placenta polyA+ (TFujwara) Homo sapiens cDNA clone GEN:516H08 5'
63	12742	25217	1	0.0E+00	D78804.1	EST_HUMAN	HUM516H08B Human placenta polyA+ (TFujwara) Homo sapiens cDNA clone GEN:516H08 5'

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Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
64	12743	25218	28.22	0.0E+00	L16558.1	NT	Human ribosomal protein L7 (RPL7) mRNA, complete cds
66	12745	25221	11.83	0.0E+00	AW069534.1	EST_HUMAN	cr48e07.x1 Jia bone marrow stroma Homo sapiens cDNA clone HBMSC_cr48e07 3'
66	12745	25222	11.83	0.0E+00	AW069534.1	EST_HUMAN	cr48e07.x1 Jia bone marrow stroma Homo sapiens cDNA clone HBMSC_cr48e07 3'
70	12748	25226	0.8	0.0E+00	M60676.1	NT	Human von Willebrand factor pseudogene corresponding to exons 23 through 34
71	12749		0.85	0.0E+00	M60676.1	NT	Human von Willebrand factor pseudogene corresponding to exons 23 through 34
79	12756	25237	3.66	0.0E+00	4758877	NT	Homo sapiens protein tyrosine phosphatase, non-receptor type substrate 1 (PTPNS1) mRNA
79	12756	25238	3.66	0.0E+00	4758877	NT	Homo sapiens protein tyrosine phosphatase, non-receptor type substrate 1 (PTPNS1) mRNA
82	12756	25237	1.9	0.0E+00	4758877	NT	Homo sapiens protein tyrosine phosphatase, non-receptor type substrate 1 (PTPNS1) mRNA
82	12756	25238	1.9	0.0E+00	4758877	NT	Homo sapiens protein tyrosine phosphatase, non-receptor type substrate 1 (PTPNS1) mRNA
85	12761	25244	0.85	0.0E+00	4501850	NT	Homo sapiens amiloride binding protein 1 (amine oxidase (copper-containing)) (ABP1), nuclear gene encoding mitochondrial protein, mRNA
86	12762		38.11	0.0E+00	4504444	NT	Homo sapiens heterogeneous nuclear ribonucleoprotein A1 (HNRPA1) mRNA
95	12771	25253	37.46	0.0E+00	5016088	NT	Homo sapiens actin, beta (ACTB) mRNA
98	12774	25256	28.23	0.0E+00	U89277.1	NT	Human polyhomeotic 1 homolog (HPH1) mRNA, partial cds
105	12781	25263	2.29	0.0E+00	AI114743.1	EST_HUMAN	HA1347 Human fetal liver cDNA library Homo sapiens cDNA
106	12782	25264	2.19	0.0E+00	AB037784.1	NT	Homo sapiens mRNA for KIAA1363 protein, partial cds
112	12785	25268	0.84	0.0E+00	X91213.1	NT	H.sapiens nrx1 gene (exon 2)
121	12792	25274	1.98	0.0E+00	AI623701.1	EST_HUMAN	ts38b05.x1 NCL_CGAP_U4 Homo sapiens cDNA clone IMAGE:2230833 3' similar to TR:Q99551 Q99551 MITOCHONDRIAL TRANSCRIPTION TERMINATION FACTOR PRECURSOR. ;
122	12792	25274	2.44	0.0E+00	AI623701.1	EST_HUMAN	ts38b05.x1 NCL_CGAP_U4 Homo sapiens cDNA clone IMAGE:2230833 3' similar to TR:Q99551 Q99551 MITOCHONDRIAL TRANSCRIPTION TERMINATION FACTOR PRECURSOR. ;
123	15383	25275	2.64	0.0E+00	N36040.1	EST_HUMAN	yy01h09.r1 Soares melanocyte 2N8HM Homo sapiens cDNA clone IMAGE:270017 5'
123	15383	25276	2.64	0.0E+00	N36040.1	EST_HUMAN	yy01h09.r1 Soares melanocyte 2N8HM Homo sapiens cDNA clone IMAGE:270017 5'
128	12795	25281	1.12	0.0E+00	4505458	NT	Homo sapiens neurotrophin 2 (NRP2) mRNA
136	12801	25289	3.85	0.0E+00	4505938	NT	Homo sapiens polymerase (RNA) II (DNA directed) polypeptide A (220kD) (POLR2A) mRNA
136	12801	25290	3.85	0.0E+00	4505938	NT	Homo sapiens polymerase (RNA) II (DNA directed) polypeptide A (220kD) (POLR2A) mRNA
144	13059	25552	0.8	0.0E+00	4503680	NT	Homo sapiens IgG Fc binding protein (FCGAMMA)BP mRNA
146	12809	25297	0.85	0.0E+00	T56945.1	EST_HUMAN	ya83g04.r2 Stratagene fetal spleen (8937205) Homo sapiens cDNA clone IMAGE:88310 5'
146	12809	25298	0.85	0.0E+00	T56945.1	EST_HUMAN	ya83g04.r2 Stratagene fetal spleen (8937205) Homo sapiens cDNA clone IMAGE:88310 5'
164	12827		35.47	0.0E+00	4504444	NT	Homo sapiens heterogeneous nuclear ribonucleoprotein A1 (HNRPA1) mRNA
168	12831	25317	2.64	0.0E+00	BF036881.1	EST_HUMAN	601460375F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3663803 5'
170	12833		92.51	0.0E+00	4504444	NT	Homo sapiens heterogeneous nuclear ribonucleoprotein A1 (HNRPA1) mRNA
173	12836	25320	0.75	0.0E+00	AF111168.2	NT	Homo sapiens serine palmitoyl transferase, subunit II gene, complete cds; and unknown genes
175	12838	25321	1.22	0.0E+00	BE265973.1	EST_HUMAN	601174270F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3529864 5'

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176	12838	25321	0.84	0.0E+00	BE295973.1	EST_HUMAN	601174270F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3529884 5'
177	12839	25322	2.37	0.0E+00	W73973.1	EST_HUMAN	zf62b05.r1 Soares_fetal_NbHH19W Homo sapiens cDNA clone IMAGE:345201 5' similar to gb:X16282_cds1 ZINC FINGER PROTEIN CLONE 647 (HUMAN);
178	12840	25323	0.77	0.0E+00	BE162832.1	EST_HUMAN	QV3-HT0457-140200-088-d04 HT0457 Homo sapiens cDNA
178	12840	25324	0.77	0.0E+00	BE162832.1	EST_HUMAN	QV3-HT0457-140200-088-d04 HT0457 Homo sapiens cDNA
179	12841	25325	1.97	0.0E+00	AF244088.1	NT	Homo sapiens zinc finger protein mRNA, complete cds
182	12844	25328	24.45	0.0E+00	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
182	12844	25328	24.45	0.0E+00	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
193	12853	25336	4.25	0.0E+00	BE018970.1	EST_HUMAN	bb24e12.y1 NIH_MGC_14 Homo sapiens cDNA clone IMAGE:2963854 5' similar to WP:Y57A10A.Z CE22631
193	12853	25337	4.25	0.0E+00	BE018970.1	EST_HUMAN	bb24e12.y1 NIH_MGC_14 Homo sapiens cDNA clone IMAGE:2963854 5' similar to WP:Y57A10A.Z CE22631
198	12858	25340	2.9	0.0E+00	AB018327.1	NT	Homo sapiens mRNA for KIAA0784 protein, partial cds
198	12858	25341	2.9	0.0E+00	AB018327.1	NT	Homo sapiens mRNA for KIAA0784 protein, partial cds
199	12859	25342	1.88	0.0E+00	AB018327.1	NT	Homo sapiens mRNA for KIAA0784 protein, partial cds
199	12859	25343	1.88	0.0E+00	AB018327.1	NT	Homo sapiens mRNA for KIAA0784 protein, partial cds
208	12869	25355	92.14	0.0E+00	D50659.1	NT	Human gamma-cytoplasmic actin (ACTGP9) pseudogene
213	12874	25360	4.7	0.0E+00	AF273045.1	NT	Homo sapiens CTCL tumor antigen se14-3 mRNA, complete cds
213	12874	25361	4.7	0.0E+00	AF273045.1	NT	Homo sapiens CTCL tumor antigen se14-3 mRNA, complete cds
215	12876	25363	8.92	0.0E+00	AF167174.1	NT	Homo sapiens chromosome X WSL3-2 protein mRNA, complete cds
215	12876	25364	8.92	0.0E+00	AF167174.1	NT	Homo sapiens chromosome X WSL3-2 protein mRNA, complete cds
226	15410	25371	33.35	0.0E+00	AI587308.1	EST_HUMAN	lq04f08.x1 NCI_CGAP_U03 Homo sapiens cDNA clone IMAGE:2207847 3' similar to gb:J03191 PROFILIN (HUMAN);
226	15410	25372	33.35	0.0E+00	AI587308.1	EST_HUMAN	lq04f08.x1 NCI_CGAP_U03 Homo sapiens cDNA clone IMAGE:2207847 3' similar to gb:J03191 PROFILIN (HUMAN);
227	12887	25374	1.91	0.0E+00	AF195658.1	NT	Homo sapiens DNA mismatch repair protein (MLH3) gene, complete cds
231	12891		44.25	0.0E+00	4508632	NT	Homo sapiens ribosomal protein L31 (RPL31) mRNA
232	12892		8.88	0.0E+00	AF132000.1	NT	Homo sapiens TADA1 protein mRNA, complete cds
239	12896	25382	2.84	0.0E+00	AB018264.1	NT	Homo sapiens mRNA for KIAA0721 protein, partial cds
240	12899	25382	1.99	0.0E+00	AB018264.1	NT	Homo sapiens mRNA for KIAA0721 protein, partial cds
241	12900	25383	3.13	0.0E+00	6878444	NT	Mus musculus lesliu-specific protein, Y-encoded-like (Tspy), mRNA
248	12908	25387	0.78	0.0E+00	BE246780.1	EST_HUMAN	TCBAP1E4468 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project-TCBA Homo sapiens cDNA clone TCBAP4466

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
248	12808	25388	0.78	0.0E+00	BE248780.1	EST_HUMAN	TCBAP1E4486 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP4486
248	12808	25389	0.78	0.0E+00	BE248780.1	EST_HUMAN	TCBAP1E4486 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP4486
256	12816	25400	0.97	0.0E+00	AB018301.1	NT	Homo sapiens mRNA for KIAA0758 protein, partial cds
256	12816	25401	0.97	0.0E+00	AB018301.1	NT	Homo sapiens mRNA for KIAA0758 protein, partial cds
259	12818	25405	9.57	0.0E+00	5453805	NT	Homo sapiens NS1-associated protein 1 (NSAP1) mRNA
261	12820		11.16	0.0E+00	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
268	12825	25411	4.93	0.0E+00	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
270	12827	25414	1.82	0.0E+00	X89772.1	NT	H. sapiens mRNA for interferon alpha/beta receptor (long form)
278	12835		7.37	0.0E+00	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
281	12847	25433	1.28	0.0E+00	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
291	12847	25434	1.28	0.0E+00	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
293	12849	25436	1.96	0.0E+00	7706028	NT	Homo sapiens hypothetical protein (LOC51250), mRNA
304	12858		2.01	0.0E+00	D83327.1	NT	Homo sapiens DCRR1 mRNA, partial cds
305	12860	25448	2.17	0.0E+00	D83327.1	NT	Homo sapiens DCRR1 mRNA, partial cds
305	12860	25450	2.17	0.0E+00	D83327.1	NT	Homo sapiens DCRR1 mRNA, partial cds
306	12861		1.14	0.0E+00	AW845283.1	EST_HUMAN	IL2-CT0031-181199-020-B03 CT0031 Homo sapiens cDNA
315	12868	25457	6.39	0.0E+00	4557029	NT	Homo sapiens potassium inwardly-rectifying channel, subfamily J, member 15 (KCNJ15) mRNA
315	12869	25458	6.39	0.0E+00	4557029	NT	Homo sapiens potassium inwardly-rectifying channel, subfamily J, member 15 (KCNJ15) mRNA
326	12880	25468	8.1	0.0E+00	AB028942.1	NT	Homo sapiens mRNA for KIAA1019 protein, partial cds
327	12881	25469	4.44	0.0E+00	AB028942.1	NT	Homo sapiens mRNA for KIAA1019 protein, partial cds
328	15413		23.15	0.0E+00	4508728	NT	Homo sapiens ribosomal protein S5 (RPS5) mRNA
329	12882	25470	0.99	0.0E+00	4503914	NT	Homo sapiens phosphoribosylglycinamide formyltransferase, phosphoribosylglycinamide synthetase, phosphoribosylaminoimidazole synthetase (GART) mRNA
330	12883		2.5	0.0E+00	AA480002.1	EST_HUMAN	zvl8c08.r1 Soares_NHMPu_S1 Homo sapiens cDNA clone IMAGE:753994 5'
331	12884	25471	18.8	0.0E+00	4507152	NT	Homo sapiens SON DNA binding protein (SON) mRNA
332	12884	25471	19.33	0.0E+00	4507152	NT	Homo sapiens SON DNA binding protein (SON) mRNA
336	12888	25475	3.18	0.0E+00	AF114488.1	NT	Homo sapiens interseith short isoform (ITSN) mRNA, complete cds
349	13000	25484	1.64	0.0E+00	O14867	SWISSPROT	TRANSCRIPTION REGULATOR PROTEIN BACH1 (BTB AND CNC HOMOLOG 1) (HA2303)
349	13000	25485	1.64	0.0E+00	O14867	SWISSPROT	TRANSCRIPTION REGULATOR PROTEIN BACH1 (BTB AND CNC HOMOLOG 1) (HA2303)
350	13001	25486	3.83	0.0E+00	7657213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
351	13001	25486	1.41	0.0E+00	7657213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
366	13015	25498	5.41	0.0E+00	5174574	NT	Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (trithorax (Drosophila) homolog); translocated to, 4 (MLLT4) mRNA
367	13016	25499	1.14	0.0E+00	4505256	NT	Homo sapiens moesin (MSN), mRNA
370	13019	25503	20.33	0.0E+00	4827057	NT	Homo sapiens X-box binding protein 1 (XBP1) mRNA
373	13022	25508	1.49	0.0E+00	U71600.1	NT	Human zinc finger protein Zfp31 (Z31) mRNA, partial cds
378	13026	25512	2.59	0.0E+00	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
378	13026	25513	2.59	0.0E+00	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
378	15414	25514	2.86	0.0E+00	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
381	13028	25516	0.74	0.0E+00	4507500	NT	Homo sapiens chromosome 21 unknown mRNA
384	13031	25520	1.3	0.0E+00	4503854	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
385	13032	25521	1.87	0.0E+00	D80006.1	NT	Human mRNA for KIAA0184 gene, partial cds
386	13032	25521	1.52	0.0E+00	D80006.1	NT	Human mRNA for KIAA0184 gene, partial cds
388	13034	25523	0.83	0.0E+00	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
398	13043	25534	3.85	0.0E+00	AU134963.1	EST_HUMAN	AU134863 PLACE1 Homo sapiens cDNA clone PLACE1000898 5'
410	13085	25578	8.92	0.0E+00	AB028942.1	NT	Homo sapiens mRNA for KIAA1019 protein, partial cds
411	13086	25579	2.03	0.0E+00	A1363014.1	EST_HUMAN	qy81h05.x1 NCI CGAP Bm25 Homo sapiens cDNA clone IMAGE:2018457 3' similar to gb:X54189
416	13051	25541	2.36	0.0E+00	AW754180.1	EST_HUMAN	PHOSPHORIBOSYLAMINE--GLYCINE LIGASE (HUMAN);
419	13053	25544	1.95	0.0E+00	4503680	NT	RC2-CT0320-300100-018-e08 GT0320 Homo sapiens cDNA
420	13054	25545	2.21	0.0E+00	4503680	NT	Homo sapiens IgG Fc binding protein (FC(GAMMA)BP) mRNA
420	13054	25546	2.21	0.0E+00	4503680	NT	Homo sapiens IgG Fc binding protein (FC(GAMMA)BP) mRNA
421	13055	25547	1.1	0.0E+00	4503680	NT	Homo sapiens IgG Fc binding protein (FC(GAMMA)BP) mRNA
422	13056	25548	1.46	0.0E+00	4503680	NT	Homo sapiens IgG Fc binding protein (FC(GAMMA)BP) mRNA
422	13056	25549	1.46	0.0E+00	4503680	NT	Homo sapiens IgG Fc binding protein (FC(GAMMA)BP) mRNA
423	13057	25550	0.95	0.0E+00	4503680	NT	Homo sapiens IgG Fc binding protein (FC(GAMMA)BP) mRNA
424	13058	25551	2.9	0.0E+00	4503680	NT	Homo sapiens IgG Fc binding protein (FC(GAMMA)BP) mRNA
425	13059	25552	1.17	0.0E+00	4503680	NT	Homo sapiens IgG Fc binding protein (FC(GAMMA)BP) mRNA
426	13060	25553	1.66	0.0E+00	X74870.1	NT	H. sapiens gene for RNA pol II largest subunit, exons 23-29
428	13060	25554	1.66	0.0E+00	X74870.1	NT	H. sapiens gene for RNA pol II largest subunit, exons 23-29
427	13060	25553	2.78	0.0E+00	X74870.1	NT	H. sapiens gene for RNA pol II largest subunit, exons 23-29
427	13060	25554	2.78	0.0E+00	X74870.1	NT	H. sapiens gene for RNA pol II largest subunit, exons 23-29
431	13064		86.04	0.0E+00	4508808	NT	Homo sapiens ribosomal protein L19 (RPL19) mRNA
445	12674	25130	1.11	0.0E+00	R17795.1	EST_HUMAN	y90a02.r1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:31652 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
453	13087	25580	1.82	0.0E+00	4503914	NT	Homo sapiens phosphoribosylglycinamide formyltransferase, phosphoribosylglycinamide synthetase,
454	13088		20.68	0.0E+00	4506728	NT	phosphoribosylaminimidazole synthetase (GART) mRNA
455	13089	25581	5.49	0.0E+00	AB028942.1	NT	Homo sapiens ribosomal protein S5 (RPS5) mRNA
456	13090	25582	10.07	0.0E+00	4507152	NT	Homo sapiens mRNA for KIAA1019 protein, partial cds
456	13090	25583	10.07	0.0E+00	4507152	NT	Homo sapiens SON DNA binding protein (SON) mRNA
457	13091	25584	5.34	0.0E+00	AF193807.1	NT	Homo sapiens SON DNA binding protein (SON) mRNA
469	13102		0.81	0.0E+00	AL163201.2	NT	Mus musculus truncated SON protein (Son) mRNA, complete cds
471	13104	25597	2.98	0.0E+00	4557878	NT	Homo sapiens chromosome 21 segment HS21C001
476	13109		0.92	0.0E+00	AA324282.1	EST_HUMAN	Homo sapiens interferon gamma receptor 1 (IFNGR1) mRNA
477	13110		1.1	0.0E+00	BE254447.1	EST_HUMAN	EST27054 Cerabellum II Homo sapiens cDNA 5' end
493	13126	25611	4.29	0.0E+00	4504532	NT	601111520F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3352348 5'
493	13126	25612	4.29	0.0E+00	4504532	NT	Homo sapiens 5-hydroxytryptamine (serotonin) receptor 1B (HTR1B) mRNA
499	13131	25620	11.34	0.0E+00	4557887	NT	Homo sapiens 5-hydroxytryptamine (serotonin) receptor 1B (HTR1B) mRNA
499	13131	25621	11.34	0.0E+00	4557887	NT	Homo sapiens keratin 18 (KRT18) mRNA
509	13142	25627	2.62	0.0E+00	AL163246.2	NT	Homo sapiens keratin 18 (KRT18) mRNA
510	13143	25628	5.1	0.0E+00	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
510	13143	25629	5.1	0.0E+00	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
519	13151	25634	6.04	0.0E+00	AB033035.1	NT	Homo sapiens chromosome 21 segment HS21C046
521	13153	25636	2.12	0.0E+00	AU132898.1	EST_HUMAN	Homo sapiens mRNA for KIAA1209 protein, partial cds
529	13161	25642	6.27	0.0E+00	BE385144.1	EST_HUMAN	AU132898 NT2RP4 Homo sapiens cDNA clone NT2RP4000837 5'
530	13417	25643	1.89	0.0E+00	AW938825.1	EST_HUMAN	601274951F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3615756 5'
533	13184	25645	1.33	0.0E+00	AL117233.1	NT	PMO-DT0065-130400-002-c06 DT0065 Homo sapiens cDNA
534	13165	25646	1.42	0.0E+00	8923955	NT	Novel human gene mapping to chromosome 1
538	13169		0.72	0.0E+00	BF373403.1	EST_HUMAN	Homo sapiens PC326 protein (PC326), mRNA
545	13176	25656	4.88	0.0E+00	AL163210.2	NT	IL2-FT0159-070800-120-F07 FT0159 Homo sapiens cDNA
552	13418	25660	1.31	0.0E+00	BE01527.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C010
556	13187	25665	1.27	0.0E+00	BF028005.1	EST_HUMAN	QV2-BT0635-160400-142-h05 BT0635 Homo sapiens cDNA
562	13193	25672	1.12	0.0E+00	AB040909.1	NT	601764858F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3966998 5'
565	13196	25675	14.24	0.0E+00	6006030	NT	Homo sapiens mRNA for KIAA1478 protein, partial cds
568	13197	25676	4.05	0.0E+00	4504036	NT	Homo sapiens transcription elongation factor B (SII), polypeptide 1-like (TCEB1L) mRNA
566	13197	25677	4.05	0.0E+00	4504036	NT	Homo sapiens guanine nucleotide binding protein (G protein), alpha 11 (Gq class) (GNA11) mRNA
568	13199	25679	1.36	0.0E+00	8923831	NT	Homo sapiens guanine nucleotide binding protein (G protein), alpha 11 (Gq class) (GNA11) mRNA
569	13200	25680	0.96	0.0E+00	8923831	NT	Homo sapiens anillin (LOC54443), mRNA

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
569	13200	25681	0.96	0.0E+00	8923631	NT	Homo sapiens anillin (LOC54443), mRNA
574	13204		4.55	0.0E+00	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
582	13212	25690	1.45	0.0E+00	AW135324.1	EST_HUMAN	UT-H-B1-acb-h-04-0-U1.s1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2713951 3'
582	13222		6.6	0.0E+00	D10083.1	NT	Homo sapiens RGH1 gene, retrovirus-like element
612	13240	25715	4.68	0.0E+00	5174742	NT	Homo sapiens ubiquinol-cytochrome c reductase, Rieske iron-sulfur polypeptide 1 (UQCRCF1), nuclear gene encoding mitochondrial protein, mRNA
625	13252		6.05	0.0E+00	J04096.1	NT	Human apolipoprotein A-1 (ApoA-1) gene, exon 1
628	13255	25729	2.19	0.0E+00	BF104898.1	EST_HUMAN	601822627F1 NIH_MGC_76 Homo sapiens cDNA clone IMAGE:4045447 5'
630	13257	25731	1.8	0.0E+00	8923631	NT	Homo sapiens hypothetical protein FLJ20701 (FLJ20701), mRNA
630	13257	25732	1.6	0.0E+00	8923631	NT	Homo sapiens hypothetical protein FLJ20701 (FLJ20701), mRNA
631	13257	25731	1.74	0.0E+00	8923631	NT	Homo sapiens hypothetical protein FLJ20701 (FLJ20701), mRNA
631	13257	25732	1.74	0.0E+00	8923631	NT	Homo sapiens hypothetical protein FLJ20701 (FLJ20701), mRNA
632	13257	25731	1.81	0.0E+00	8923631	NT	Homo sapiens hypothetical protein FLJ20701 (FLJ20701), mRNA
632	13257	25732	1.81	0.0E+00	8923631	NT	Homo sapiens hypothetical protein FLJ20701 (FLJ20701), mRNA
637	13260	25735	0.88	0.0E+00	4501854	NT	Homo sapiens acetyl-Coenzyme A carboxylase beta (ACACB), mRNA
642	13265	25741	0.94	0.0E+00	AF221712.1	NT	Homo sapiens Smad- and Olf-interacting zinc finger protein mRNA, partial cds
642	13265	25742	0.94	0.0E+00	AF221712.1	NT	Homo sapiens Smad- and Olf-interacting zinc finger protein mRNA, partial cds
650	13273	25750	3.63	0.0E+00	AF149773.1	NT	Homo sapiens NOD1 protein (NOD1) gene, exons 1, 2, and 3
652	13275	25753	0.89	0.0E+00	AB037807.1	NT	Homo sapiens mRNA for KIAA1388 protein, partial cds
654	13277	25754	1.8	0.0E+00	6808918	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
655	13278	25755	2.31	0.0E+00	6808918	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
655	13278	25756	2.31	0.0E+00	6808918	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
656	13279	25757	0.73	0.0E+00	6808918	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
656	13279	25758	0.73	0.0E+00	6808918	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
663	13287	25768	1.2	0.0E+00	AA399486.1	EST_HUMAN	z86c07.r1 Soares, testis_NHT Homo sapiens cDNA clone IMAGE:726732 5'
687	13291	25772	6.55	0.0E+00	D11078.1	NT	Homo sapiens RGH2 gene, retrovirus-like element
671	13295	25775	48.91	0.0E+00	W78811.1	EST_HUMAN	zh51b04.r1 Soares, fetal_liver_spleen_INFLS_S1 Homo sapiens cDNA clone IMAGE:415567 5' similar to gb:A21187 ALPHA-2-MACROGLOBULIN PRECURSOR (HUMAN);
671	13295	25776	48.91	0.0E+00	W78811.1	EST_HUMAN	zh51b04.r1 Soares, fetal_liver_spleen_INFLS_S1 Homo sapiens cDNA clone IMAGE:415567 5' similar to gb:A21187 ALPHA-2-MACROGLOBULIN PRECURSOR (HUMAN);
674	13298		3.09	0.0E+00	4885526	NT	Homo sapiens novel SH2-containing protein 3 (NSP3) mRNA
681	13305	25768	2.96	0.0E+00	6006003	NT	Homo sapiens glutamate receptor, ionotropic, N-methyl D-aspartate 2B (GRIN2B) mRNA
683	13307	25791	1.7	0.0E+00	5031624	NT	Homo sapiens CCAAT-box-binding transcription factor (CBF2) mRNA

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688	13310	25785	1.77	0.0E+00	U05235.1	NT	Human neutral amino acid transporter (ASCT1) gene, exon 8
690	13314	25788	0.9	0.0E+00	AF108388.1	NT	Homo sapiens sodium/calcium exchanger isoform NaCa3 (NCX1) mRNA, complete cds
690	13314	25789	0.9	0.0E+00	AF108389.1	NT	Homo sapiens sodium/calcium exchanger isoform NaCa3 (NCX1) mRNA, complete cds
698	13319	25804	4.78	0.0E+00	4828847	NT	Homo sapiens protein kinase, X-linked (PRKX) mRNA
698	13319	25805	4.78	0.0E+00	4828847	NT	Homo sapiens protein kinase, X-linked (PRKX) mRNA
702	15421		1.23	0.0E+00	X57147.1	NT	Human endogenous retrovirus pHE.1 (ERV9)
711	13332	25819	21.02	0.0E+00	4504424	NT	Homo sapiens high-mobility group (nonhistone chromosomal) protein 1 (HMG1) mRNA
718	13337	25823	5.36	0.0E+00	AB028012.1	NT	Homo sapiens mRNA for KIAA1089 protein, partial cds
728	13348	25838	7.22	0.0E+00	7657468	NT	Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1), mRNA
738	13358	25852	87.91	0.0E+00	AA814537.1	EST_HUMAN	np49d01.at NCI CGAP Br.1.1 Homo sapiens cDNA clone IMAGE:1128633 3' similar to gb:X57352
742	13362	25856	4.31	0.0E+00	M60675.1	NT	INTERFERON-INDUCIBLE PROTEIN 1-8U (HUMAN);
742	13362	25857	4.31	0.0E+00	M60675.1	NT	Human von Willebrand factor gene, exons 23 through 34
752	13372	25868	1.48	0.0E+00	5032182	NT	Human von Willebrand factor gene, exons 23 through 34
758	13377	25872	4.75	0.0E+00	AF264750.1	NT	Homo sapiens TNF receptor-associated factor 1 (TRAF1) mRNA
758	13377	25873	4.75	0.0E+00	AF264750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
760	13379	25876	11.52	0.0E+00	11545800	NT	Homo sapiens ALR-like protein mRNA, partial cds
768	13385	25884	2.52	0.0E+00	BE241577.1	EST_HUMAN	Homo sapiens hypothetical protein FLJ21634 (FLJ21634), mRNA
768	13404	25908	1.47	0.0E+00	AF228980.2	NT	TCAAP1D0779 Pediatric acute myelogenous leukemia cell (FAB M1) Baylor-HGSC project-TCAA Homo sapiens cDNA clone TCAAP0779
788	13404	25909	1.47	0.0E+00	AF228980.2	NT	Homo sapiens MHC class I antigen (HLA-G) mRNA, HLA-G1 allele, complete cds
787	13405	25910	0.72	0.0E+00	AF170492.1	NT	Homo sapiens MHC class I antigen (HLA-G) mRNA, HLA-G1 allele, complete cds
780	13408	25913	19.87	0.0E+00	J03764.1	NT	Homo sapiens chloride channel CLC4 (CLC4) mRNA, complete cds
780	13408	25914	19.87	0.0E+00	J03764.1	NT	Human, plasminogen activator inhibitor-1 gene, exons 2 to 9
783	13411	25915	1.06	0.0E+00	AB037760.1	NT	Human, plasminogen activator inhibitor-1 gene, exons 2 to 9
784	13412	25916	1.82	0.0E+00	6812749	NT	Homo sapiens mRNA for KIAA1339 protein, partial cds
788	13425	25918	2.4	0.0E+00	D30612.1	NT	Homo sapiens zinc finger protein 212 (ZNF212), mRNA
787	13414	25919	3.29	0.0E+00	BE869735.1	EST_HUMAN	Homo sapiens mRNA for repressor protein, partial cds
801	13418	25923	2.87	0.0E+00	R48915.1	EST_HUMAN	601445847F1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:3849803 5'
802	13419	25924	4.83	0.0E+00	5032088	NT	yf69g08.1 Scores breast 2N1bHst Homo sapiens cDNA clone IMAGE:154046 5'
811	13428	25933	1.72	0.0E+00	AB011398.1	NT	Homo sapiens splicing factor 3a, subunit 1, 120kD (SF3A1), mRNA
814	13432	25937	3.26	0.0E+00	7661965	NT	Homo sapiens gene for AF-6, complete cds
825	13442	25949	1.15	0.0E+00	D80006.1	NT	Homo sapiens KIAA0170 gene product (KIAA0170), mRNA
825	13442	25950	1.15	0.0E+00	D80006.1	NT	Human mRNA for KIAA0184 gene, partial cds
							Human mRNA for KIAA0184 gene, partial cds

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
830	13447	25954	2.88	0.0E+00	X89772.1	NT	H.sapiens mRNA for interferon alfa/beta receptor (long form)
834	13451	25958	2.77	0.0E+00	AB020717.1	NT	Homo sapiens mRNA for KIAA0910 protein, partial cds
834	13451	25959	2.77	0.0E+00	AB020717.1	NT	Homo sapiens mRNA for KIAA0910 protein, partial cds
839	13455	25965	9.17	0.0E+00	5174478	NT	Homo sapiens pericentriolar protein (PCNT) mRNA
840	13456		8.31	0.0E+00	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
857	13473	25986	1.71	0.0E+00	7657213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
858	13474	25987	2.81	0.0E+00	7657213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
860	13476	25989	2.3	0.0E+00	4557686	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
866	13481	25995	1.58	0.0E+00	AF108830.1	NT	Homo sapiens serine-threonine protein kinase (MNBH) mRNA, complete cds
866	13481	25996	1.58	0.0E+00	AF108830.1	NT	Homo sapiens serine-threonine protein kinase (MNBH) mRNA, complete cds
867	13482	25997	0.95	0.0E+00	AF108830.1	NT	Homo sapiens serine-threonine protein kinase (MNBH) mRNA, complete cds
872	13487	26002	2.8	0.0E+00	4503854	NT	Homo sapiens GA-binding protein transcription factor, alpha subunit (GABPA), mRNA
876	13490	26007	1.96	0.0E+00	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
876	13490	26008	1.96	0.0E+00	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
883	13497		1.72	0.0E+00	AF027153.1	NT	Homo sapiens sodium/myo-inositol cotransporter (SLC5A3) gene, complete cds
887	13501	26019	6	0.0E+00	AB028942.1	NT	Homo sapiens mRNA for KIAA1019 protein, partial cds
887	13501	26020	6	0.0E+00	AB028942.1	NT	Homo sapiens mRNA for KIAA1019 protein, partial cds
888	13502	26021	12.68	0.0E+00	4507152	NT	Homo sapiens SON DNA binding protein (SON) mRNA
889	13503	26022	6.37	0.0E+00	AB028942.1	NT	Homo sapiens mRNA for KIAA1019 protein, partial cds
890	13504	26023	15.55	0.0E+00	4506728	NT	Homo sapiens ribosomal protein S5 (RPS5) mRNA
894	13508	26026	1.64	0.0E+00	AB020717.1	NT	Homo sapiens mRNA for KIAA0910 protein, partial cds
894	13508	26027	1.64	0.0E+00	AB020717.1	NT	Homo sapiens mRNA for KIAA0910 protein, partial cds
895	13509	26028	2.12	0.0E+00	AA533272.1	EST_HUMAN	U96407.s1 NCL CGAP_P10 Homo sapiens cDNA clone IMAGE:997453
895	13509	26029	2.12	0.0E+00	AA533272.1	EST_HUMAN	U96407.s1 NCL CGAP_P10 Homo sapiens cDNA clone IMAGE:997453
896	13510		8.29	0.0E+00	BF877694.1	EST_HUMAN	802085578F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4249915 5'
900	13514	26030	1.87	0.0E+00	7657213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
900	13514	26031	1.87	0.0E+00	7657213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
901	13515	26032	2.03	0.0E+00	7657213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
901	13515	26033	2.03	0.0E+00	7657213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
924	13537	26056	0.95	0.0E+00	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
931	13544	26061	1.84	0.0E+00	BE089592.1	EST_HUMAN	QV0-BT0703-280400-211-g11 BT0703 Homo sapiens cDNA
931	13544	26062	1.84	0.0E+00	BE089592.1	EST_HUMAN	QV0-BT0703-280400-211-g11 BT0703 Homo sapiens cDNA
941	13554	26071	2.92	0.0E+00	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
951	13563		32.19	0.0E+00	4504958	NT	Homo sapiens laminin receptor 1 (97kD, ribosomal protein SA) (LAMR1), mRNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
954	13566	26079	6.19	0.0E+00	U35464.1	NT	Human protein C inhibitor (PCI-B) mRNA, complete cds
954	13568	26080	6.19	0.0E+00	U35464.1	NT	Human protein C inhibitor (PCI-B) mRNA, complete cds
956	13563		27.9	0.0E+00	4504958	NT	Homo sapiens laminin receptor 1 (67kD, ribosomal protein SA) (LAMR1), mRNA
957	13568	26082	269.29	0.0E+00	AF089747.1	NT	Homo sapiens alpha-1-antichymotrypsin precursor, mRNA, partial cds
958	13569	26083	16.83	0.0E+00	S69364.1	NT	protein C inhibitor [human, leukocytes, Genomic, 1216 nt, segment 2 of 5]
958	13569	26084	16.83	0.0E+00	S69364.1	NT	protein C inhibitor [human, leukocytes, Genomic, 1216 nt, segment 2 of 5]
958	13569	26085	16.83	0.0E+00	S69364.1	NT	protein C inhibitor [human, leukocytes, Genomic, 1216 nt, segment 2 of 5]
959	13570	26086	12.58	0.0E+00	L28101.1	NT	Homo sapiens kallistatin (PI4) gene, exons 1-4, complete cds
968	13568	26111	0.9	0.0E+00	M37190.1	NT	Human ras inhibitor mRNA, 3' end
968	13568	26112	8.4	0.0E+00	M37190.1	NT	Human ras inhibitor mRNA, 3' end
968	13568	26113	0.6	0.0E+00	M37190.1	NT	Human ras inhibitor mRNA, 3' end
968	13601	26114	1.28	0.0E+00	4507430	NT	Homo sapiens thymotrophic embryonic factor (TEF), mRNA
968	13601	26115	1.28	0.0E+00	4507430	NT	Homo sapiens thymotrophic embryonic factor (TEF), mRNA
967	15430	26122	6.65	0.0E+00	A1001948.1	EST_HUMAN	os98803.s1 NCI_CGAP_G03 Homo sapiens cDNA clone IMAGE:1613404.3'
967	15430	26123	6.65	0.0E+00	A1001948.1	EST_HUMAN	os98803.s1 NCI_CGAP_G03 Homo sapiens cDNA clone IMAGE:1613404.3'
999	13610	26125	8.95	0.0E+00	7657266	NT	Homo sapiens KIAA0929 protein Mss2 interacting nuclear target (MINT) homolog (KIAA0929), mRNA
1010	13620	26135	2.35	0.0E+00	AB030566.1	NT	Homo sapiens mRNA for PSP24, complete cds
1019	13629	26142	1.58	0.0E+00	BF366974.1	EST_HUMAN	PM2-GN0014-050900-001-f02 GN0014 Homo sapiens cDNA
1019	13629	26143	1.56	0.0E+00	BF366974.1	EST_HUMAN	PM2-GN0014-050900-001-f02 GN0014 Homo sapiens cDNA
1019	13629	26144	1.56	0.0E+00	BF366974.1	EST_HUMAN	PM2-GN0014-050900-001-f02 GN0014 Homo sapiens cDNA
1021	13631	26147	2.54	0.0E+00	X52207.1	NT	Homo sapiens partial c-fgr gene, exons 2 and 3
1021	13631	26148	2.54	0.0E+00	X52207.1	NT	Homo sapiens partial c-fgr gene, exons 2 and 3
1030	13640	26155	2.14	0.0E+00	4757669	NT	Homo sapiens chromodomain protein, Y chromosome-like (CDYL), mRNA
1042	13651	26163	1.69	0.0E+00	U83668.1	NT	Human beta-tubulin (TUB4q) gene, complete cds
1043	13652	26164	31.97	0.0E+00	U83668.1	NT	Human beta-tubulin (TUB4q) gene, complete cds
1044	13652	26164	15.2	0.0E+00	U83668.1	NT	Human beta-tubulin (TUB4q) gene, complete cds
1047	13655		5.72	0.0E+00	AF198490.1	NT	Homo sapiens 8q22.1 region and MTG8 (CBFA2T1) gene, partial cds
1048	13655		7.75	0.0E+00	AF198490.1	NT	Homo sapiens 8q22.1 region and MTG8 (CBFA2T1) gene, partial cds
1052	13659	26170	1.6	0.0E+00	AF111170.3	NT	Homo sapiens 14q32 Jagged2 gene, complete cds; and unknown gene
1053	13659	26170	2.85	0.0E+00	AF111170.3	NT	Homo sapiens 14q32 Jagged2 gene, complete cds; and unknown gene
1054	13659	26170	2.84	0.0E+00	AF111170.3	NT	Homo sapiens 14q32 Jagged2 gene, complete cds; and unknown gene
1055	13660	26171	2.87	0.0E+00	AF111170.3	NT	Homo sapiens 14q32 Jagged2 gene, complete cds; and unknown gene
1058	13663	26174	1.68	0.0E+00	7661685	NT	Homo sapiens DKFZP586M0122 protein (DKFZP586M0122), mRNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1062	13667	26178	3.66	0.0E+00	5803114	NT	Homo sapiens inner membrane protein, mitochondrial (mitiflin) (IMMT), mRNA
1063	13668		2.66	0.0E+00	AA459680.1	EST_HUMAN	aa86g07.s1 Stragelene fetal retina 937202 Homo sapiens cDNA clone IMAGE:838236 3' similar to SW:PRS8_HUMAN P47210 26S PROTEASE REGULATORY SUBUNIT 8:
1066	13671	26182	0.94	0.0E+00	N43182.1	EST_HUMAN	EST5124 WATM1 Homo sapiens cDNA clone 51124 similar to DNA-DIRECTED RNA POLYMERASE II (alignment Ser and Pro with BLAS Tx or p)
1066	13671	26183	0.94	0.0E+00	N43182.1	EST_HUMAN	EST5124 WATM1 Homo sapiens cDNA clone 51124 similar to DNA-DIRECTED RNA POLYMERASE II (alignment Ser and Pro with BLAS Tx or p)
1067	13672	26184	2.11	0.0E+00	4759249	NT	Homo sapiens TRAF family member-associated NFKB activator (TANK) mRNA
1067	13672	26185	2.11	0.0E+00	4759249	NT	Homo sapiens TRAF family member-associated NFKB activator (TANK) mRNA
1071	13676		2.96	0.0E+00	8922933	NT	Homo sapiens hypothetical protein FLJ111196 (FLJ111196), mRNA
1085	13690	26200	5.51	0.0E+00	4758569	NT	Homo sapiens heat shock 70kD protein 8B (mortalin-2) (HSPA8B) mRNA
1103	13707	26215	2.09	0.0E+00	4826672	NT	Homo sapiens cadherin 6, K-cadherin (fetal kidney) (CDH6) mRNA
1103	13707	26216	2.09	0.0E+00	4826672	NT	Homo sapiens cadherin 6, K-cadherin (fetal kidney) (CDH6) mRNA
1107	13711	26220	3.31	0.0E+00	8923824	NT	Homo sapiens hypothetical protein FLJ20695 (FLJ20695), mRNA
1107	13711	26221	3.31	0.0E+00	8923824	NT	Homo sapiens hypothetical protein FLJ20695 (FLJ20695), mRNA
1108	13712	26222	72.04	0.0E+00	AJ245922.1	NT	Homo sapiens mRNA for alpha-tubulin 8 (TUBA8 gene)
1110	13714		1.08	0.0E+00	8923087	NT	Homo sapiens hypothetical protein FLJ20080 (FLJ20080), mRNA
1112	13716	26226	4.16	0.0E+00	5174384	NT	Homo sapiens alkylation repair, alkB homolog (ABH), mRNA
1121	13724	26237	4.89	0.0E+00	4758117	NT	Homo sapiens Death associated protein 3 (DAP3) mRNA
1135	13738	26247	2.88	0.0E+00	BE003208.1	EST_HUMAN	MRO-BN0115-200300-003-M08 BN0115 Homo sapiens cDNA
1158	13761	26271	4.25	0.0E+00	7706134	NT	Homo sapiens potassium channel, subfamily K, member 9 (KCNK9), mRNA
1158	13761	26272	4.25	0.0E+00	7706134	NT	Homo sapiens potassium channel, subfamily K, member 9 (KCNK9), mRNA
1171	13773	26282	1.29	0.0E+00	4826947	NT	Homo sapiens protein kinase, X-linked (PRKX) mRNA
1171	13773	26283	1.29	0.0E+00	4826947	NT	Homo sapiens protein kinase, X-linked (PRKX) mRNA
1172	13774	26284	23.49	0.0E+00	4506712	NT	Homo sapiens ribosomal protein S27a (RPS27A) mRNA
1174	13776	26286	1.24	0.0E+00	8923290	NT	Homo sapiens hypothetical protein FLJ20309 (FLJ20309), mRNA
1177	13779	26289	15.95	0.0E+00	AB002059.1	NT	Homo sapiens DNA for Human P2XM, complete cds
1178	13781	26290	37.33	0.0E+00	AB002059.1	NT	Homo sapiens DNA for Human P2XM, complete cds
1180	13782	26291	6.32	0.0E+00	7657468	NT	Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1), mRNA
1180	13782	26292	6.32	0.0E+00	7657468	NT	Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1), mRNA
1184	13785	26295	2.19	0.0E+00	7706500	NT	Homo sapiens Npw38-binding protein Npw6P (LOC51729), mRNA
1185	13786	26296	1.92	0.0E+00	X95826.1	NT	H. sapiens ART4 gene
1185	13786	26297	1.92	0.0E+00	X95826.1	NT	H. sapiens ART4 gene
1186	13787	26298	2.16	0.0E+00	A1147650.1	EST_HUMAN	qb22d10.x1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:1697011 3'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1188	13789	26300	1.59	0.0E+00	AB020710.1	NT	Homo sapiens mRNA for KIAA0903 protein, partial cds
1187	13788	26309	0.7	0.0E+00	4758081	NT	Homo sapiens chondroitin sulfate proteoglycan 2 (versican) (CSPG2) mRNA
1197	13788	26310	0.7	0.0E+00	4758081	NT	Homo sapiens chondroitin sulfate proteoglycan 2 (versican) (CSPG2) mRNA
1198	13789	26311	1	0.0E+00	9668844	NT	Homo sapiens chromosome 12 open reading frame 3 (C12ORF3), mRNA
1210	13810	26323	3.09	0.0E+00	795076	NT	Homo sapiens glutamate decarboxylase 1 (brain, 87kD) (GAD1), transcript variant GAD25, mRNA
1210	13810	26324	3.09	0.0E+00	795076	NT	Homo sapiens glutamate decarboxylase 1 (brain, 87kD) (GAD1), transcript variant GAD25, mRNA
1213	13813	26327	1.78	0.0E+00	AB037835.1	NT	Homo sapiens mRNA for KIAA1414 protein, partial cds
1220	13820	26336	8.63	0.0E+00	4557897	NT	Homo sapiens keratin 18 (KRT18) mRNA
1251	13848	26379	0.85	0.0E+00	7657356	NT	Homo sapiens mult. (E. coli) homolog 3 (MLH3), mRNA
1285	13862	26379	0.63	0.0E+00	7657356	NT	Homo sapiens hypothetical protein FLJ10697 (FLJ10697), mRNA
1289	13868	26383	2.13	0.0E+00	AF264750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
1289	13868	26384	2.13	0.0E+00	AF264750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
1270	13867	26385	2.51	0.0E+00	AF264750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
1271	15436	26386	2.03	0.0E+00	AF264750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
1289	13884	26409	6.85	0.0E+00	AF109718.1	NT	Homo sapiens chromosome 3 subtelomeric region
1290	13885	26410	1.33	0.0E+00	4503098	NT	Homo sapiens chondroitin sulfate proteoglycan 4 (melanoma-associated) (CSPG4), mRNA
1300	13894	26418	0.83	0.0E+00	4505740	NT	Homo sapiens prefoldin 4 (PF4D4) mRNA
1309	13903		2.3	0.0E+00	Y18000.1	NT	Homo sapiens NF2 gene
1317	13911	26431	180.44	0.0E+00	4508718	NT	Homo sapiens ribosomal protein S2 (RPS2) mRNA
1324	13918	26440	3.35	0.0E+00	AF084479.1	NT	Homo sapiens Williams-Beuren syndrome deletion transcript 9 (WBSCR9) mRNA, complete cds
1331	13925	26445	1.6	0.0E+00	AB040940.1	NT	Homo sapiens mRNA for KIAA1507 protein, partial cds
1331	13925	26446	1.6	0.0E+00	AB040940.1	NT	Homo sapiens mRNA for KIAA1507 protein, partial cds
1343	13938	26459	2.36	0.0E+00	5174748	NT	Homo sapiens Wolfram syndrome (WFS) mRNA
1343	13938	26460	2.36	0.0E+00	5174748	NT	Homo sapiens Wolfram syndrome (WFS) mRNA
1343	13938	26461	2.36	0.0E+00	5174748	NT	Homo sapiens Wolfram syndrome (WFS) mRNA
1344	13939		2.61	0.0E+00	AF098158.1	NT	Homo sapiens protein phosphatase 2A BR gamma subunit gene, exon 5
1354	15438	26473	2.05	0.0E+00	7657529	NT	Homo sapiens rhabdoid tumor deletion region protein 1 (RTDR1), mRNA
1354	15438	26474	2.05	0.0E+00	7657529	NT	Homo sapiens rhabdoid tumor deletion region protein 1 (RTDR1), mRNA
1360	13954	26480	4.79	0.0E+00	5803146	NT	Homo sapiens ring finger protein 9 (RNF9), mRNA
1361	13955	26481	1.2	0.0E+00	4508004	NT	Homo sapiens zinc finger protein 173 (ZNF173) mRNA
1363	13957	26482	0.97	0.0E+00	Y07829.2	NT	Homo sapiens RFB30 gene for RING finger protein
1364	13958	26483	4.9	0.0E+00	5803146	NT	Homo sapiens zinc finger protein 173 (ZNF173) mRNA
1365	13959	26484	1.23	0.0E+00	4508004	NT	Homo sapiens zinc finger protein 173 (ZNF173) mRNA
1367	13961	26486	3.51	0.0E+00	AB011149.1	NT	Homo sapiens mRNA for KIAA0577 protein, complete cds

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1368	13962	26487	2.76	0.0E+00	7661965	NT	Homo sapiens KIAA0170 gene product (KIAA0170), mRNA
1369	13963	26488	4.67	0.0E+00	7661965	NT	Homo sapiens KIAA0170 gene product (KIAA0170), mRNA
1370	13964	26489	4.11	0.0E+00	8587387	NT	Homo sapiens period (Drosophila) homolog 3 (PER3), mRNA
1370	13964	26490	4.11	0.0E+00	8587387	NT	Homo sapiens period (Drosophila) homolog 3 (PER3), mRNA
1382	13975	26503	1	0.0E+00	M14123.1	NT	Human endogenous retrovirus HERV-K10
1442	14035	26563	0.98	0.0E+00	BE257955.1	EST_HUMAN	601109792F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3350471 5'
1442	14035	26564	0.96	0.0E+00	BE257955.1	EST_HUMAN	601109792F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3350471 5'
1454	14048	26578	0.92	0.0E+00	AJ250014.1	NT	Homo sapiens mRNA for Familial Cylindromatosis cyd gene
1462	14054	26587	1.2	0.0E+00	AI208756.1	EST_HUMAN	qq38b08.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1837427 3' similar to WP:T27A1.5 CE14213 ;
1463	14055	26588	11.41	0.0E+00	6042206	NT	RAN, member RAS oncogene family/Homo sapiens RAN, member RAS oncogene family (RAN), mRNA
1472	14064	26599	1	0.0E+00	4505846	NT	Homo sapiens proprotein convertase subtilisin/kexin type 2 (PCSK2) mRNA
1472	14064	26600	1	0.0E+00	4505846	NT	Homo sapiens proprotein convertase subtilisin/kexin type 2 (PCSK2) mRNA
1474	14068	26603	3.28	0.0E+00	7705565	NT	Homo sapiens KIAA1114 protein (KIAA1114), mRNA
1474	14068	26604	3.28	0.0E+00	7705565	NT	Homo sapiens KIAA1114 protein (KIAA1114), mRNA
1477	14069	26606	7.19	0.0E+00	AJ238093.1	NT	Homo sapiens partial AF-4 gene, exons 2 to 7 and Alu repeat elements
1488	14081	26620	3.54	0.0E+00	AF038280.1	NT	Homo sapiens alpha1-6glucosyltransferase (alpha1-6FucT) gene, exon 7
1510	14102	26638	3.27	0.0E+00	AL132999.1	NT	Novel human gene on chromosome 20
1512	14104	26639	1.4	0.0E+00	AL137764.1	NT	Novel human gene mapping to chromosome 1
1516	14108	26644	1.45	0.0E+00	D87077.1	NT	Human mRNA for KIAA0240 gene, partial cds
1519	14111	26647	9.86	0.0E+00	5912487	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
1521	14113	26649	2.74	0.0E+00	7661965	NT	Homo sapiens KIAA0170 gene product (KIAA0170), mRNA
1521	14113	26650	2.74	0.0E+00	7661965	NT	Homo sapiens KIAA0170 gene product (KIAA0170), mRNA
1558	14150	26682	1.6	0.0E+00	7706434	NT	Homo sapiens hHDC for homolog of Drosophila headcase (LOC51696), mRNA
1573	14168	26697	1.46	0.0E+00	AA481172.1	EST_HUMAN	aa34a03.1 NCI_CGAP GCBT Homo sapiens cDNA clone IMAGE:315116 5'
1579	14172	26701	23.67	0.0E+00	AF023860.1	NT	Cercopithecus aethiops cyclophilin A mRNA, complete cds
1579	14172	26702	23.67	0.0E+00	AF023860.1	NT	Cercopithecus aethiops cyclophilin A mRNA, complete cds
1581	14174	26705	1.2	0.0E+00	AW976097.1	EST_HUMAN	EST:388206 MAGC resequences, MAGN Homo sapiens cDNA
1581	14174	26706	1.2	0.0E+00	AW976097.1	EST_HUMAN	EST:388206 MAGC resequences, MAGN Homo sapiens cDNA
1582	14175	26707	1.02	0.0E+00	D10884.1	NT	Bovine mRNA for neurocalcin
1584	14177		3.69	0.0E+00	U78027.1	NT	Homo sapiens Bruton's tyrosine kinase (BTK), alpha-D-galactosidase A (GLA), L44-like ribosomal protein (L44L) and FTP3 (FTP3) genes, complete cds
1585	14178	26710	1.89	0.0E+00	4505404	NT	Homo sapiens transmembrane glycoprotein (GPNMB), mRNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1585	14178	28711	1.89	0.0E+00	4505404	NT	Homo sapiens transmembrane glycoprotein (GPNMB) mRNA
1588	14179	28712	3.3	0.0E+00	7682405	NT	Homo sapiens KIAA0957 protein (KIAA0957), mRNA
1587	14180		8.59	0.0E+00	7656972	NT	Homo sapiens TNF-inducible protein CG12-1 (CG12-1), mRNA
1593	14188	28718	8.98	0.0E+00	M98478.1	NT	Human transglutaminase mRNA, complete cds
1598	15445		25.62	0.0E+00	4508654	NT	Homo sapiens ribosomal protein L5 (RPL5) mRNA
1597	14189	28720	28.65	0.0E+00	M14199.1	NT	Human laminin receptor (2H5 epitope) mRNA, 5' end
1609	14202	28735	11.52	0.0E+00	4503098	NT	Homo sapiens chondroitin sulfate proteoglycan 4 (melanoma-associated) (CSPG4), mRNA
1617	14210		1.58	0.0E+00	D00333.1	NT	human c-yes-2 gene
1624	14217	28749	10.11	0.0E+00	Z83738.1	NT	H. sapiens HH2B/e gene
1625	14218	28750	2.24	0.0E+00	5921460	NT	Homo sapiens butyrophilin, subfamily 2, member A1 (BTN2A1), mRNA
1626	14218	28751	2.24	0.0E+00	5921460	NT	Homo sapiens butyrophilin, subfamily 2, member A1 (BTN2A1), mRNA
1628	14219	28752	7.63	0.0E+00	AV690831.1	EST_HUMAN	AV690831 GKC Homo sapiens cDNA clone GKCB0F02 5'
1628	14219	28753	7.63	0.0E+00	AV690831.1	EST_HUMAN	AV690831 GKC Homo sapiens cDNA clone GKCB0F02 5'
1628	15448	28754	2.78	0.0E+00	AB040805.1	NT	Homo sapiens mRNA for KIAA1472 protein, partial cds
1632	14224	28755	1.01	0.0E+00	AF157476.1	NT	Homo sapiens DNA polymerase zeta catalytic subunit (REV3) mRNA, complete cds
1634	14228	28758	3.22	0.0E+00	7682183	NT	Homo sapiens KIAA0569 gene product (KIAA0569), mRNA
1634	14228	28759	3.22	0.0E+00	7682183	NT	Homo sapiens KIAA0569 gene product (KIAA0569), mRNA
1638	14228	28760	37.34	0.0E+00	5729878	NT	Homo sapiens heat shock 70kD protein 10 (HSC71) (HSPA10), mRNA
1638	14228	28761	37.34	0.0E+00	5729878	NT	Homo sapiens heat shock 70kD protein 10 (HSC71) (HSPA10), mRNA
1638	14230	28763	0.87	0.0E+00	M91803.1	NT	Human sodium channel mRNA
1652	14244	28778	7.35	0.0E+00	H26973.1	EST_HUMAN	yo76c05.s1 Soares adult brain N2b-4HB55Y Homo sapiens cDNA clone IMAGE:183848 3'
1661	14254	28789	1.46	0.0E+00	AB046829.1	NT	Homo sapiens mRNA for KIAA1609 protein, partial cds
1661	14254	28790	1.46	0.0E+00	AB046829.1	NT	Homo sapiens mRNA for KIAA1609 protein, partial cds
1680	14272	28805	0.9	0.0E+00	AW444637.1	EST_HUMAN	UI-H-BI3-ajw-c-04-Q-UJ.s1 NCI CGAP Sub5 Homo sapiens cDNA clone IMAGE:2733294 3'
1708	14301	28838	0.91	0.0E+00	A1768104.1	EST_HUMAN	wg81b07.x1 Soares NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:2733294 3'
1709	14302	28839	2.5	0.0E+00	AF057177.1	NT	TR:Q62788 Q62788 CYS2/HIS2 ZINC FINGER PROTEIN. ;
1713	14305	28843	1.38	0.0E+00	M29580.1	NT	Homo sapiens T-cell receptor gamma V1 gene region
1713	14305	28844	1.38	0.0E+00	M29580.1	NT	Human zinc-finger protein 7 (ZFP7) mRNA, complete cds
1715	14307	28846	6.78	0.0E+00	4557887	NT	Human zinc-finger protein 7 (ZFP7) mRNA, complete cds
1716	14308	28847	0.95	0.0E+00	7657065	NT	Homo sapiens keratin 18 (KRT18) mRNA
1720	14312	28850	0.95	0.0E+00	BE222374.1	EST_HUMAN	Hu11405.x1 NCI CGAP Lu24 Homo sapiens cDNA clone IMAGE:3166281 3' similar to TR:O95147 O95147 MKP-1 LIKE PROTEIN TYROSINE PHOSPHATASE ;

Table 4

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1720	14312	26851	0.95	0.0E+00	BE222374.1	EST_HUMAN	hu1105.x1 NCLCGAP_Lu24 Homo sapiens cDNA clone IMAGE:3168281 3' similar to TR:095147 095147 MKP-1 LIKE PROTEIN TYROSINE PHOSPHATASE
1723	14314	26855	3.69	0.0E+00	H30132.1	EST_HUMAN	yo59e08.r1 Soares breast 3NbHbSt Homo sapiens cDNA clone IMAGE:182246 5' similar to gb:M64089 GAMMA-GLUTAMYLTRANSEPTIDASE 5 PRECURSOR (HUMAN);
1723	14314	26856	3.69	0.0E+00	H30132.1	EST_HUMAN	yo59e08.r1 Soares breast 3NbHbSt Homo sapiens cDNA clone IMAGE:182246 5' similar to gb:M64089 GAMMA-GLUTAMYLTRANSEPTIDASE 5 PRECURSOR (HUMAN);
1725	14316	26858	6.58	0.0E+00	Z80780.1	NT	H. sapiens H2B/h gene
1725	14316	26859	6.58	0.0E+00	Z80780.1	NT	H. sapiens H2B/h gene
1728	14319		20.47	0.0E+00	5031748	NT	Homo sapiens high-mobility group (nonhistone chromosomal) protein 17 (HMG17), mRNA
1737	14327	26871	4.36	0.0E+00	8923841	NT	Homo sapiens FOXJ2 forkhead factor (LOC55810), mRNA
1742	14332	26877	0.92	0.0E+00	M75980.1	NT	Human hepatocyte growth factor gene, exon 15
1742	14332	26878	0.92	0.0E+00	M75980.1	NT	Human hepatocyte growth factor gene, exon 15
1745	14335	26882	1.17	0.0E+00	4828973	NT	Homo sapiens RNA binding motif protein, Y chromosome, family 1, member A1 (RBM7A1) mRNA
1751	14341	26889	3.79	0.0E+00	AB028542.1	NT	Homo sapiens WAVE2 mRNA for WASP-family protein, complete cds
1753	14343		3.16	0.0E+00	S94400.1	NT	TCR zeta [human, Genomic/mRNA, 365 nt, segment 1 of 8]
1792	14352	26888	1.05	0.0E+00	4557538	NT	Homo sapiens solute carrier family 28 (sulfate transporter), member 2 (SLC28A2) mRNA
1781	14371	26916	2.35	0.0E+00	AF273941.1	NT	Homo sapiens SMCY (SMCY) gene, complete cds
1820	15450		35.11	0.0E+00	4508718	NT	Homo sapiens ribosomal protein S2 (RPS2) mRNA
1825	14414	26960	1.31	0.0E+00	4557556	NT	Homo sapiens E1A binding protein p300 (EP300) mRNA
1825	14414	26961	1.31	0.0E+00	4557556	NT	Homo sapiens E1A binding protein p300 (EP300) mRNA
1828	14417	26965	1.47	0.0E+00	U63963.1	NT	Human CSF-1 receptor (FMS) gene, complete cds, and (SMF) gene, partial cds
1831	15451	26969	5.45	0.0E+00	4505332	NT	Homo sapiens nuclear autoantigenic sperm protein (histone-binding) (NASP) mRNA
1843	14431	26984	13.62	0.0E+00	U14967.1	NT	Human ribosomal protein L21 mRNA, complete cds
1845	14433	26987	7.44	0.0E+00	AB002331.1	NT	Human mRNA for KIAA0333 gene, partial cds
1846	14434	26988	9.59	0.0E+00	4502264	NT	Homo sapiens activating transcription factor 4 (tax-responsive enhancer element B67) (ATF4) mRNA
1846	14434	26989	9.59	0.0E+00	4502264	NT	Homo sapiens activating transcription factor 4 (tax-responsive enhancer element B67) (ATF4) mRNA
1846	14434	26990	9.59	0.0E+00	4502264	NT	Homo sapiens activating transcription factor 4 (tax-responsive enhancer element B67) (ATF4) mRNA
1857	14445	27001	1.57	0.0E+00	4506328	NT	Homo sapiens protein tyrosine phosphatase, receptor-type, zeta polypeptide 1 (PTPRZ1) mRNA
1863	14450	27009	1.38	0.0E+00	4504626	NT	Homo sapiens immunoglobulin superfamily, member 3 (IGSF3) mRNA, and translated products
1863	14450	27010	1.38	0.0E+00	4504626	NT	Homo sapiens immunoglobulin superfamily, member 3 (IGSF3) mRNA, and translated products
1874	14460	27016	7.62	0.0E+00	6005855	NT	Homo sapiens Retina-derived POU-domain factor-1 (RPF-1), mRNA

Table 4

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1874	14480	27017	7.82	0.0E+00	6005855	NT	Homo sapiens Retina-derived POU-domain factor-1 (RPF-1), mRNA
1884	14470	27027	0.93	0.0E+00	AB032878.1	NT	Homo sapiens mRNA for KIAA1152 protein, partial cds
1884	14470	27028	0.93	0.0E+00	AB032878.1	NT	Homo sapiens mRNA for KIAA1152 protein, partial cds
1888	14473	27030	5	0.0E+00	4828783	NT	Homo sapiens potassium voltage-gated channel, Shab-related subfamily, member 1 (KCNB1) mRNA
1888	14473	27031	5	0.0E+00	4828783	NT	Homo sapiens potassium voltage-gated channel, Shab-related subfamily, member 1 (KCNB1) mRNA
1889	14474	27032	8.6	0.0E+00	U07147.1	NT	Human retinal degeneration slow (RDS) gene, exon 1
1889	14474	27033	8.6	0.0E+00	U07147.1	NT	Human retinal degeneration slow (RDS) gene, exon 1
1892	14477	27036	1.32	0.0E+00	AW207280.1	EST_HUMAN	UI-H-B11-efn-f07-Q-UI.s1 NCJ_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2722333 3'
1892	14477	27037	1.32	0.0E+00	AW207280.1	EST_HUMAN	UI-H-B11-efn-f07-Q-UI.s1 NCJ_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2722333 3'
1916	14501	27056	3.38	0.0E+00	BE277465.1	EST_HUMAN	601179164F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3547239 5'
1916	14501	27057	3.38	0.0E+00	BE277465.1	EST_HUMAN	601179164F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3547239 5'
1939	14523	27078	1.77	0.0E+00	BE006292.1	EST_HUMAN	RC2-BN0126-200300-012-b04 BN0126 Homo sapiens cDNA
1987	14551	27109	2.92	0.0E+00	4506394	NT	Homo sapiens RAD1 (S. pombe) homolog (RAD1) mRNA, and translated products
1987	14551	27107	2.92	0.0E+00	4506394	NT	Homo sapiens RAD1 (S. pombe) homolog (RAD1) mRNA, and translated products
1975	14559		1.84	0.0E+00	AF157476.1	NT	Homo sapiens DNA polymerase zeta catalytic subunit (REV3) mRNA, complete cds
1976	14555	27116	2.72	0.0E+00	M98478.1	NT	Human transglutaminase mRNA, complete cds
1976	14555	27117	2.72	0.0E+00	M98478.1	NT	Human transglutaminase mRNA, complete cds
1981	14584	27124	1.69	0.0E+00	4507484	NT	Homo sapiens transforming growth factor, beta 3 (TGFB3), mRNA
1981	14584	27125	1.69	0.0E+00	4507484	NT	Homo sapiens transforming growth factor, beta 3 (TGFB3), mRNA
1985	14587		5.68	0.0E+00	AF240786.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
1990	14572		5.14	0.0E+00	M55632.1	NT	Human topoisomerase I pseudogene 1
1999	14581	27139	3.45	0.0E+00	4809282	NT	Homo sapiens histidine ammonia-lyase (HAL) mRNA
1999	14581	27140	3.45	0.0E+00	4809282	NT	Homo sapiens histidine ammonia-lyase (HAL) mRNA
2009	14591		0.99	0.0E+00	AL163252.2	NT	Homo sapiens chromosome 21 segment HS21C052
2011	14593	27153	1.13	0.0E+00	8400716	NT	Homo sapiens nebulin (NEB), mRNA
2011	14593	27154	1.13	0.0E+00	8400716	NT	Homo sapiens nebulin (NEB), mRNA
2012	14594	27155	2.07	0.0E+00	4826638	NT	Homo sapiens actinin, alpha 4 (ACTN4) mRNA
2012	14594	27156	2.07	0.0E+00	4826638	NT	Homo sapiens actinin, alpha 4 (ACTN4) mRNA
2024	14608	27171	1.03	0.0E+00	AB018333.1	NT	Homo sapiens mRNA for KIAA0790 protein, partial cds
2024	14608	27172	1.03	0.0E+00	AB018333.1	NT	Homo sapiens mRNA for KIAA0790 protein, partial cds
2030	14612	27176	1.43	0.0E+00	M33782.1	NT	Human TFEB protein mRNA, partial cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2030	14612	27177	1.43	0.0E+00	M33782.1	NT	Human TFEB protein mRNA, partial cds
2032	14614	27178	0.89	0.0E+00	AW193024.1	EST_HUMAN	X69501.x1 NCI_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2676913 3'
2032	14614	27179	0.89	0.0E+00	AW193024.1	EST_HUMAN	X69501.x1 NCI_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2676913 3'
2033	14615	27180	7.94	0.0E+00	6912457	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
2033	14615	27181	7.94	0.0E+00	6912457	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
2035	14617	27183	0.88	0.0E+00	AB011149.1	NT	Homo sapiens mRNA for KIAA0577 protein, complete cds
2036	14618	27184	0.92	0.0E+00	Z47556.1	NT	H sapiens genes for semenogelin I and semenogelin II
2036	14618	27185	0.92	0.0E+00	Z47556.1	NT	H sapiens genes for semenogelin I and semenogelin II
2043	14625	27194	2.25	0.0E+00	AB040946.1	NT	Homo sapiens mRNA for KIAA1513 protein, partial cds
2097	14676	27245	0.94	0.0E+00	7706742	NT	Homo sapiens TP53TG3a (TP53TG3a), mRNA
2102	14681	27249	2.71	0.0E+00	BE743215.1	EST_HUMAN	601573895F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3835198 5'
2102	14681	27250	2.71	0.0E+00	BE743215.1	EST_HUMAN	601573895F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3835198 5'
2104	14683	27251	1.39	0.0E+00	4503648	NT	Homo sapiens coagulation factor IX (plasma thromboplastic component, Christmas disease, hemophilia B) (F9), mRNA
2105	14684	27252	3.79	0.0E+00	AU140831.1	EST_HUMAN	AU140831 PLACE4 Homo sapiens cDNA clone PLACE4000321 5'
2106	14086	26603	1.97	0.0E+00	7705565	NT	Homo sapiens KIAA1114 protein (KIAA1114), mRNA
2106	14086	26604	1.97	0.0E+00	7705565	NT	Homo sapiens KIAA1114 protein (KIAA1114), mRNA
2108	14686	27254	1.59	0.0E+00	AA077589.1	EST_HUMAN	7B22E10 Chromosome 7 Fetal Brain cDNA Library Homo sapiens cDNA clone 7B22E10
2108	14686	27255	1.59	0.0E+00	AA077589.1	EST_HUMAN	7B22E10 Chromosome 7 Fetal Brain cDNA Library Homo sapiens cDNA clone 7B22E10
2110	14688		1.75	0.0E+00	7657468	NT	Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1), mRNA
2112	14690		1.76	0.0E+00	4585863	NT	Homo sapiens phosphodiesterase 6A, cGMP-specific, rod, alpha (PDE6A), mRNA
2114	14692		2.2	0.0E+00	A1244247.1	EST_HUMAN	q68008.x1 NCI_CGAP_U12 Homo sapiens cDNA clone IMAGE:1988871 3' similar to contains Alu repetitive element
2119	14697	27266	2.72	0.0E+00	BE877225.1	EST_HUMAN	601485146F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3887747 5'
2121	14699	27268	1.8	0.0E+00	BF315325.1	EST_HUMAN	601902804F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4135320 5'
2121	14699	27269	1.8	0.0E+00	BF315325.1	EST_HUMAN	601902804F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4135320 5'
2126	14704	27275	2.31	0.0E+00	BE697125.1	EST_HUMAN	RC3-CT0413-270700-022-d10 CT0413 Homo sapiens cDNA
2126	14704	27276	2.31	0.0E+00	BE697125.1	EST_HUMAN	RC3-CT0413-270700-022-d10 CT0413 Homo sapiens cDNA
2133	14711	27283	2.79	0.0E+00	L00620.1	NT	Human plasma membrane calcium ATPase isoform 2 (APT2B2) mRNA, complete cds
2133	14711	27284	2.79	0.0E+00	L00620.1	NT	Human plasma membrane calcium ATPase isoform 2 (APT2B2) mRNA, complete cds
2134	14712	27285	1.61	0.0E+00	AJ287709.1	NT	Homo sapiens mRNA for CDC2L5 protein kinase, (CDC2L5 gene), isoform 1
2139	14717	27289	1.28	0.0E+00	4758489	NT	Homo sapiens GTP binding protein 1 (GTPBP1) mRNA
2143	14721	27292	34.67	0.0E+00	BE500995.1	EST_HUMAN	7834402.x1 NCI_CGAP_GC8 Homo sapiens cDNA clone IMAGE:3220610 3' similar to SW:DTD_HUMAN P50443 SULFATE TRANSPORTER ;

Table 4

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2160	14737		2.08	0.0E+00	BE767964.1	EST_HUMAN	QV1-GN0085-140800-318-q10 GN0085 Homo sapiens cDNA
2161	14738		1.8	0.0E+00	AF018963.1	NT	Homo sapiens X-linked juvenile retinoschisis protein (XLRS1) gene, exon 8 and complete cds
2163	14740	27310	3.84	0.0E+00	BF027562.1	EST_HUMAN	601672066F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3954785 5'
2165	14742	27311	0.98	0.0E+00	AF240788.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
2166	14743	27312	1.35	0.0E+00	AW752708.1	EST_HUMAN	IL3-CT0219-271068-022-G10 CT0219 Homo sapiens cDNA
2168	14745	27314	6.51	0.0E+00	AI904640.1	EST_HUMAN	QV-BT065-020399-082 BT065 Homo sapiens cDNA
2168	14745	27315	6.51	0.0E+00	AI904640.1	EST_HUMAN	QV-BT065-020399-092 BT065 Homo sapiens cDNA
2202	14778		0.97	0.0E+00	7657252	NT	Homo sapiens potassium large conductance calcium-activated channel, subfamily M, beta member 3-like (KCNCMB3L), mRNA
2224	14789		1.37	0.0E+00	L14787.1	NT	Human DNA-binding protein mRNA, 3' end
2230	14805	27377	10.57	0.0E+00	AV738288.1	EST_HUMAN	AV738288 CB Homo sapiens cDNA clone C8NBDE08 5'
2230	14805	27378	10.57	0.0E+00	AV738288.1	EST_HUMAN	AV738288 CB Homo sapiens cDNA clone C8NBDE08 5'
2232	14807	27380	1.12	0.0E+00	AA931691.1	EST_HUMAN	cc32601 s1 NCJ_CGAP_Lu15 Homo sapiens cDNA clone IMAGE:1567896 3'
2234	14809		7.75	0.0E+00	M19828.1	NT	Human apolipoprotein B-100 (apoB) gene, exons 22 through 28
2236	14811	27383	10.88	0.0E+00	BF344434.1	EST_HUMAN	602014829F1 NCJ_CGAP_Bm64 Homo sapiens cDNA clone IMAGE:4150734 5'
2237	14812	27384	20.34	0.0E+00	BE748999.1	EST_HUMAN	601572186T1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:3839012 3'
2240	14815	27387	2.59	0.0E+00	BF377897.1	EST_HUMAN	CM1-TN0141-250900-439-b08 TN0141 Homo sapiens cDNA
2240	14815	27388	2.59	0.0E+00	BF377897.1	EST_HUMAN	CM1-TN0141-250900-439-b08 TN0141 Homo sapiens cDNA
2244	15461	27393	2.04	0.0E+00	BF313617.1	EST_HUMAN	601900261F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4129822 5'
2247	14821	27396	1.56	0.0E+00	BE018750.1	EST_HUMAN	bb84602.Y1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3048082 5' similar to TR:Q15170 Q15170 TRANSCRIPTION FACTOR S-H-RELATED PROTEIN ;
2248	14822	27397	0.94	0.0E+00	AA042813.1	EST_HUMAN	zk53c07.s1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:486540 3' similar to gb:X65857.cds1 OLFACTORY RECEPTOR-LIKE PROTEIN HOMP07E (HUMAN);
2248	14822	27398	0.94	0.0E+00	AA042813.1	EST_HUMAN	zk53c07.s1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:486540 3' similar to gb:X65857.cds1 OLFACTORY RECEPTOR-LIKE PROTEIN HOMP07E (HUMAN);
2256	14830	27406	2.87	0.0E+00	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
2256	14830	27407	2.87	0.0E+00	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
2257	14831	27408	0.98	0.0E+00	7682401	NT	Homo sapiens KIAA0952 protein (KIAA0952), mRNA
2257	14831	27409	0.98	0.0E+00	7682401	NT	Homo sapiens KIAA0952 protein (KIAA0952), mRNA
2262	14836		1.58	0.0E+00	U36264.1	NT	Human beta-prime-adaptin (BAM22) gene, exon 16
2263	14837	27414	0.91	0.0E+00	AA282281.1	EST_HUMAN	zt12b10.r1 NCJ_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:712891 5'
2270	14844	27420	0.92	0.0E+00	BE987487.1	EST_HUMAN	601432317F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3917463 5'
2271	14845		4.79	0.0E+00	M20903.1	NT	Human apolipoprotein C-1 pseudogene, complete cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2282	14856	27433	6.28	0.0E+00	4557566	NT	Homo sapiens E1A binding protein p300 (EP300) mRNA
2288	14862	27437	1.15	0.0E+00	7682401	NT	Homo sapiens KIAA0952 protein (KIAA0952) mRNA
2295	14869	27445	1.05	0.0E+00	BE95281.1	EST_HUMAN	601433525F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3918607 5'
2299	14872	27448	1.28	0.0E+00	AB037784.1	NT	Homo sapiens mRNA for KIAA1363 protein, partial cds
2339	14910	27482	3.84	0.0E+00	11545748	NT	Homo sapiens differentially expressed in FDCP (mouse homolog) 6 (DEF6) mRNA
2339	14910	27483	3.84	0.0E+00	11545748	NT	Homo sapiens differentially expressed in FDCP (mouse homolog) 8 (DEF6) mRNA
2340	14911	27484	2.06	0.0E+00	A1076404.1	EST_HUMAN	oz00c07.x1 Soares fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:1674828 3'
2342	14913	27486	1.81	0.0E+00	AA429001.1	EST_HUMAN	zv78a11.r1 Soares total_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:759740 5'
2342	14913	27487	1.81	0.0E+00	AA429001.1	EST_HUMAN	zv78a11.r1 Soares total_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:759740 5'
2344	14915	27489	1.98	0.0E+00	AA680367.1	EST_HUMAN	z111e12.s1 Soares fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:430510 3'
2345	14916	27490	3.65	0.0E+00	BF347039.1	EST_HUMAN	602021848F1 NCI_CGAP_Bim67 Homo sapiens cDNA clone IMAGE:4157339 5'
2350	14921	27496	3.07	0.0E+00	L02840.1	NT	Homo sapiens potassium channel Kv2.1 mRNA, complete cds
2351	14922	27497	1.6	0.0E+00	6325468	NT	Homo sapiens flavin containing monooxygenase 3 (FMO3) mRNA
2358	14929	27503	1.17	0.0E+00	BE976095.1	EST_HUMAN	7f22a02.x1 NCI_CGAP_CLL1 Homo sapiens cDNA clone IMAGE:3295370 3' similar to TR:094839 094839
2360	14931	27504	5.89	0.0E+00	AF044571.1	NT	Homo sapiens phosphotyrosine kinase alpha subunit (PHK42) gene, exon 32
2361	14932	27505	2.94	0.0E+00	A1625542.1	EST_HUMAN	ly57c08.x1 NCI_CGAP_U12 Homo sapiens cDNA clone IMAGE:2283182 3'
2366	14937	27509	1.72	0.0E+00	5803178	NT	Homo sapiens sperm specific antigen 2 (SSFA2) mRNA
2366	14937	27510	1.72	0.0E+00	5803178	NT	Homo sapiens sperm specific antigen 2 (SSFA2) mRNA
2377	14946	27520	0.99	0.0E+00	D83778.1	NT	Human mRNA for KIAA0184 gene, partial cds
2377	14946	27521	0.99	0.0E+00	D83778.1	NT	Human mRNA for KIAA0184 gene, partial cds
2378	14947	27521	1.07	0.0E+00	4557521	NT	Homo sapiens deiodinase, lodothyronine, type I (DIO1) mRNA
2387	14956	27527	2.83	0.0E+00	5174678	NT	Homo sapiens signal regulatory protein, beta, 1 (SIRP-BETA-1) mRNA
2391	14959	27531	1.95	0.0E+00	AU131142.1	EST_HUMAN	AU131142 NT2RP3 Homo sapiens cDNA clone NT2RP3002064 5'
2392	14960	27532	8.95	0.0E+00	BE794026.1	EST_HUMAN	601586843F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3941003 5'
2393	14961	27532	0.98	0.0E+00	AW867076.1	EST_HUMAN	MRT-SN0033-120400-002-a04 SN0033 Homo sapiens cDNA
2394	14962	27533	5.08	0.0E+00	7662017	NT	Homo sapiens KIAA0244 protein (KIAA0244) mRNA
2395	14963	27534	1.69	0.0E+00	4758497	NT	Homo sapiens hexose-6-phosphate dehydrogenase (glucose 1-dehydrogenase) (H6PD) mRNA
2395	14963	27535	1.69	0.0E+00	4758497	NT	Homo sapiens hexose-6-phosphate dehydrogenase (glucose 1-dehydrogenase) (H6PD) mRNA
2396	14964		3.28	0.0E+00	AF280107.1	NT	Homo sapiens cytochrome P450 polypeptide 43 (CYP3A43) gene, partial cds; cytochrome P450 polypeptide 4 (CYP3A4) and cytochrome P450 polypeptide 7 (CYP3A7) genes, complete cds; and cytochrome P450 polypeptide 5 (CYP3A5) gene, partial cds
2398	14966	27537	10.16	0.0E+00	AU118082.1	EST_HUMAN	AU118082 HEMBA1 Homo sapiens cDNA clone HEMBA1002839 5'
2398	14966	27538	10.16	0.0E+00	AU118082.1	EST_HUMAN	AU118082 HEMBA1 Homo sapiens cDNA clone HEMBA1002839 5'

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2398	14968	27539	10.16	0.0E+00	AU118082.1	EST_HUMAN	AU118082 HEMBA1 Homo sapiens cDNA clone HEMBA1002839 5'
2458	15025	27595	4.3	0.0E+00	AU118082.1	EST_HUMAN	AU118082 HEMBA1 Homo sapiens cDNA clone HEMBA1006155 5'
2459	15028		3.3	0.0E+00	A042035.1	EST_HUMAN	060502.x1 Soares_NHMPu_S1 Homo sapiens cDNA clone IMAGE:1860683 3' similar to TR:O08662
2460	15027	27598	1.06	0.0E+00	8923620	NT	O08662 230KDA PHOSPHATIDYLINOSITOL 4-KINASE. ; Homo sapiens hypothetical protein FLJ20693 (FLJ20693). mRNA
2463	15030	27598	1.3	0.0E+00	AW303988.1	EST_HUMAN	x1507.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2813221 3' similar to TR:O54924
2465	15032		1.28	0.0E+00	BE95505.1	EST_HUMAN	O54924 EXO84. ; 601432608F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3918168 5'
2478	15043		1.17	0.0E+00	AB005922.1	EST_HUMAN	AB005922 HeLa cDNA (T.Nona) Homo sapiens cDNA similar to adenylate kinase isozyme 2
2480	15048	27615	8.35	0.0E+00	8006002	NT	Homo sapiens glutamate receptor, ionotropic, N-methyl D-aspartate 2A (GRIN2A) mRNA
2484	15049	27619	1.94	0.0E+00	D85608.1	NT	Homo sapiens gene for cholecystokinin type-A receptor, complete cds
2484	15049	27620	1.94	0.0E+00	D85608.1	NT	Homo sapiens gene for cholecystokinin type-A receptor, complete cds
2491	15056	27629	3.24	0.0E+00	AF106275.1	NT	Homo sapiens immunoglobulin-like transcript 1c variant 4 (LT1c) gene, exon 6
2499	15063	27638	3.07	0.0E+00	5729777	NT	Homo sapiens collagen, type XI, alpha 1 (COL12A1), mRNA
2507	15071	27644	4.18	0.0E+00	BF569144.1	EST_HUMAN	60218458T1 NIH_MGC_42 Homo sapiens cDNA clone IMAGE:4300383 3'
2518	15082	27655	2.85	0.0E+00	AW468922.1	EST_HUMAN	he04104.x1 NCI_CGAP_K1412 Homo sapiens cDNA clone IMAGE:2872759 3'
2520	15084	27656	2.91	0.0E+00	AW501010.1	EST_HUMAN	UI-HF-BP0p-als-c-07-Q-U1.1 NIH_MGC_51 Homo sapiens cDNA clone IMAGE:3072780 5'
2529	15093		1.39	0.0E+00	A1287878.1	EST_HUMAN	q23108.x1 NCI_CGAP_Lym6 Homo sapiens cDNA clone IMAGE:1982435 3' similar to contains element MIR repetitive element ;
2537	15101	27674	1.54	0.0E+00	5453965	NT	Homo sapiens protein kinase, AMP-activated, alpha 2 catalytic subunit (PRKAA2) mRNA
2537	15101	27675	1.54	0.0E+00	5453965	NT	Homo sapiens protein kinase, AMP-activated, alpha 2 catalytic subunit (PRKAA2) mRNA
2548	15112		1.81	0.0E+00	AW813853.1	EST_HUMAN	RC3-ST0197-300300-016-c04 ST0197 Homo sapiens cDNA
2552	15118	27688	9.72	0.0E+00	BE795542.1	EST_HUMAN	601592530F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3946518 5'
2553	15117	27687	1.32	0.0E+00	BF509482.1	EST_HUMAN	UI-H-B14-aoz-b-08-Q-U1.s1 NCI_CGAP_Sub88 Homo sapiens cDNA clone IMAGE:3086535 3'
2555	15119	27689	1.52	0.0E+00	Z32684.2	NT	Homo sapiens mRNA for membrane transport protein (XK gene)
2557	15121		3.57	0.0E+00	5453871	NT	Homo sapiens platelet-derived growth factor receptor-like (PDGFR) mRNA
2559	15123	27682	0.89	0.0E+00	BE910378.1	EST_HUMAN	601503356F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3905148 5'
2560	15124	27683	3.1	0.0E+00	7957488	NT	Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1), mRNA
2561	15125	27684	3.58	0.0E+00	BE150965.1	EST_HUMAN	RC4-HT0276-160200-013-d05 HT0276 Homo sapiens cDNA
2562	15126	27685	1.24	0.0E+00	8923340	NT	Homo sapiens hypothetical protein FLJ20366 (FLJ20366). mRNA
2563	15127	27688	3	0.0E+00	U93239.1	NT	Human Sec62 (Sec62) mRNA, complete cds
2568	15132	27700	1.34	0.0E+00	BE868490.1	EST_HUMAN	60150821F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3909868 5'
2571	15134	27704	4.84	0.0E+00	BE875511.1	EST_HUMAN	60148924F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3891371 5'
2571	15134	27705	4.84	0.0E+00	BE875511.1	EST_HUMAN	60148924F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3891371 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2587	15150	27714	0.9	0.0E+00	BE536921.1	EST_HUMAN	601064738F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3451181 5'
2592	15154	27721	9.34	0.0E+00	AU143277.1	EST_HUMAN	AU143277 Y79AA1 Homo sapiens cDNA clone Y79AA1001673 5'
2592	15154	27722	9.34	0.0E+00	AU143277.1	EST_HUMAN	AU143277 Y79AA1 Homo sapiens cDNA clone Y79AA1001673 5'
2593	15155	27723	0.9	0.0E+00	BE292898.1	EST_HUMAN	601105312F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2887855 5'
2593	15155	27724	0.9	0.0E+00	BE292898.1	EST_HUMAN	601105312F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2887855 5'
2596	15158	27726	8.62	0.0E+00	AF245505.1	NT	Homo sapiens adicican mRNA, complete cds
2633	15402	27766	1.76	0.0E+00	AB037836.1	NT	Homo sapiens mRNA for KIAA1415 protein, partial cds
2633	15402	27767	1.76	0.0E+00	AB037836.1	NT	Homo sapiens mRNA for KIAA1415 protein, partial cds
2634	15194		3.12	0.0E+00	BF513835.1	EST_HUMAN	U1-H-BW1-amp-f-120-JUL1 NCI CGAP Sub7 Homo sapiens cDNA clone IMAGE:3070831 3'
2643	15202	27775	1.24	0.0E+00	AI571737.1	EST_HUMAN	In19d08.x1 NCI CGAP Bm25 Homo sapiens cDNA clone IMAGE:2189055 3' similar to gb:L20977 CALCIUM-TRANSPORTING ATPASE PLASMA MEMBRANE, BRAIN ISOFORM 2 (HUMAN); Homo sapiens TATA box binding protein (TBP)-associated factor, RNA polymerase II, 1, 28kd (TAF2I) mRNA
2644	15203	27776	2.06	0.0E+00	5032150	NT	Homo sapiens mRNA for KIAA1438 protein, partial cds
2647	15206	27779	6.91	0.0E+00	AB037859.1	NT	Homo sapiens mRNA for KIAA1438 protein, partial cds
2648	15207	27780	0.99	0.0E+00	BE795445.1	EST_HUMAN	601590108F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3944304 5'
2648	15207	27781	0.99	0.0E+00	BE795445.1	EST_HUMAN	601590108F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3944304 5'
2651	15210	27782	1.16	0.0E+00	BE293328.1	EST_HUMAN	601114372F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:3051389 5'
2655	15214		5.98	0.0E+00	BE792472.1	EST_HUMAN	601584330F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3939222 5'
2663	15221	27793	1.73	0.0E+00	4504698	NT	Homo sapiens IMP (inosine triphosphate) dehydrogenase 1 (IMPDH1) mRNA
2671	15229		1.65	0.0E+00	U78027.1	NT	Homo sapiens Bruton's tyrosine kinase (BTK), alpha-D-galactosidase A (GLA), L44-like ribosomal protein (L44L) and FTP3 (FTP3) genes, complete cds
2672	15230	27800	6.98	0.0E+00	AF173227.1	NT	Homo sapiens guanylate cyclase-activating protein 2 (GUCA1B) gene, exon 1
2676	15234	27801	2.15	0.0E+00	AB011108.1	NT	Homo sapiens mRNA for KIAA0536 protein, partial cds
2680	15238	27805	1.01	0.0E+00	AU130403.1	EST_HUMAN	AU130403 NT2RP3 Homo sapiens cDNA clone NT2RP3000779 5'
2680	15238	27806	1.01	0.0E+00	AU130403.1	EST_HUMAN	AU130403 NT2RP3 Homo sapiens cDNA clone NT2RP3000779 5'
2682	15240	27808	1.22	0.0E+00	AW887015.1	EST_HUMAN	RC1-OT0086-220300-011-d07 OT0086 Homo sapiens cDNA
2685	15243	27811	3.43	0.0E+00	BE583165.1	EST_HUMAN	601298714F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3628923 5'
2686	15244		2.17	0.0E+00	BE531263.1	EST_HUMAN	601278373F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3610287 5'
2712	15269	27837	1.4	0.0E+00	8622843	NT	Homo sapiens hypothetical protein FLJ11052 (FLJ11052), mRNA
2748	15303		9.56	0.0E+00	AA316723.1	EST_HUMAN	EST186414 HCC cell line (metastasis to liver in mouse) II Homo sapiens cDNA 5' end similar to ribosomal protein L29
2749	15304	27868	12.57	0.0E+00	BE794884.1	EST_HUMAN	60158625F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3943591 5'
2755	15310	27876	2.37	0.0E+00	U36253.1	NT	Human beta-prime-adaptin (BAM22) gene, exon 5
2757	15312	27878	0.97	0.0E+00	7689517	NT	Homo sapiens neuregulin 1 (NRG1), transcript variant SMDF, mRNA

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2758	15313	27879	1.42	0.0E+00	AF110763.1	NT	Homo sapiens skeletal muscle LIM-protein 1 (FHL-1) gene, complete cds
2760	15315	27881	1.23	0.0E+00	AB051826.1	NT	Homo sapiens hG28K mRNA for GTP-binding protein like 1, complete cds
2765	15319	27885	20.41	0.0E+00	BE796376.1	EST_HUMAN	60159169F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3945983 5'
2766	15320	27886	2.11	0.0E+00	BF680632.1	EST_HUMAN	60215923F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4297132 5'
2769	15376	27890	14.33	0.0E+00	BE566433.1	EST_HUMAN	60133548F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3689584 5'
2770	15323		1.77	0.0E+00	AV721647.1	EST_HUMAN	AV721647 HTB Homo sapiens cDNA clone HTB909 5'
2772	15325	27893	2.47	0.0E+00	5174486	NT	Homo sapiens spermatogenesis associated PD1 (KIAA0757) mRNA
2772	15325	27894	2.47	0.0E+00	5174486	NT	Homo sapiens spermatogenesis associated PD1 (KIAA0757) mRNA
2773	15326	27895	1.25	0.0E+00	8923441	NT	Homo sapiens hypothetical protein FLJ20477 (FLJ20477), mRNA
2773	15326	27896	1.25	0.0E+00	8923441	NT	Homo sapiens hypothetical protein FLJ20477 (FLJ20477), mRNA
2774	15327	27897	2.27	0.0E+00	AF280195.1	NT	Homo sapiens hypertension-related calcium-regulated gene mRNA, complete cds
2775	15328		131.05	0.0E+00	AV651066.1	EST_HUMAN	AV651066 GLC Homo sapiens cDNA clone GLCCLD07 3'
2776	15329	27898	4.94	0.0E+00	BF377897.1	EST_HUMAN	CM1-TN0141-250900-439-b08 TN0141 Homo sapiens cDNA
2776	15329	27899	4.94	0.0E+00	BF377897.1	EST_HUMAN	CM1-TN0141-250900-439-b08 TN0141 Homo sapiens cDNA
2780	15333	27902	7.42	0.0E+00	4757963	NT	Homo sapiens cerebellar degeneration-related protein (34kD) (CDR1) mRNA
2780	15333	27903	7.42	0.0E+00	4757963	NT	Homo sapiens cerebellar degeneration-related protein (34kD) (CDR1) mRNA
2784	15337	27908	3.11	0.0E+00	BE747193.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C001
2786	15349		0.88	0.0E+00	AL163201.2	NT	U1-HBW1-arnw-e-07-Q.U1.s1 NCI_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3071340 3'
2787	15350	27919	2.78	0.0E+00	BF514110.1	EST_HUMAN	Homo sapiens chondroitin sulfate proteoglycan 4 (melanoma-associated) (CSPG4), mRNA
2804	15356	27928	0.88	0.0E+00	4503098	NT	Homo sapiens angiopoietin-3 (ANG-3), mRNA
2809	15361	27929	1.76	0.0E+00	7705275	NT	Homo sapiens angiopoietin-3 (ANG-3), mRNA
2809	15361	27930	4.3	0.0E+00	BF677694.1	EST_HUMAN	60208557F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4248915 5'
2810	15362	27930	1.1	0.0E+00	7427522	NT	Homo sapiens protein tyrosine phosphatase, receptor type, T (PTPR), mRNA
2814	15366	27936	17.28	0.0E+00	AV725534.1	EST_HUMAN	AV725534 HTC Homo sapiens cDNA clone HTCCCA03 5'
2817	15369	27939	17.28	0.0E+00	AV725534.1	EST_HUMAN	AV725534 HTC Homo sapiens cDNA clone HTCCCA03 5'
2819	15371		9.44	0.0E+00	AI879163.1	EST_HUMAN	au55404.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2518663 5' similar to
2822	15374	27944	1.69	0.0E+00	BF530661.1	EST_HUMAN	SW:R13A_HUMAN P40429 60S RIBOSOMAL PROTEIN L13A
2823	15375	27945	7.68	0.0E+00	BE872768.1	EST_HUMAN	60207195F1 NCI_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4214879 5'
2825	15377	27946	1.55	0.0E+00	AU131494.1	EST_HUMAN	601450912F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3854842 5'
2825	15377	27947	1.55	0.0E+00	AU131494.1	EST_HUMAN	AU131494 NT2RP3 Homo sapiens cDNA clone NT2RP3002672 5'
2826	15378	27948	34.11	0.0E+00	BE300344.1	EST_HUMAN	AU131494 NT2RP3 Homo sapiens cDNA clone NT2RP3002672 5'
2826	15378	27948	34.11	0.0E+00	BE300344.1	EST_HUMAN	600944794F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:2960806 5'
2828	15378	27949	34.11	0.0E+00	BE300344.1	EST_HUMAN	600944794F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:2960806 5'

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2832	12881	25345	7.88	0.0E+00	S76830.1	NT	glycoprotein D=Duffy group antigen [human, blood, Genomic DNA, 3088 nt]
2835	15385		1.75	0.0E+00	AB033281.1	NT	Homo sapiens BTRCP2 mRNA for F-box and WD-repeats protein isoform C, complete cds
2841	13382	25881	1.88	0.0E+00	AF264750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
2841	13382	25882	1.88	0.0E+00	AF264750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
2846	13682	28192	3.33	0.0E+00	4503202	NT	Homo sapiens cytochrome P450, subfamily 1 (dioxin-inducible), polypeptide 1 (glaucoma 3, primary infantile) (CYP1B1) mRNA
2846	13682	28193	3.33	0.0E+00	4503202	NT	Homo sapiens cytochrome P450, subfamily 1 (dioxin-inducible), polypeptide 1 (glaucoma 3, primary infantile) (CYP1B1) mRNA
2861	15480	27956	4.7	0.0E+00	X85980.1	NT	H. sapiens serine hydroxymethyltransferase pseudogene
2882	15481		2.28	0.0E+00	AF088624.1	NT	Homo sapiens 5-aminolevulinic synthase 2 (ALAS2) gene, complete cds
2883	15482		1.83	0.0E+00	AB040960.1	NT	Homo sapiens mRNA for KIAA1527 protein, partial cds
2870	15488		1.06	0.0E+00	AJ238852.1	NT	Homo sapiens partial rpl3 gene for ribosomal protein L3, U82 snoRNA, U83a snoRNA and U83b snoRNA genes
2871	15489	27060	2.43	0.0E+00	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
2875	15493	27963	1.55	0.0E+00	M80802.1	NT	Human AHNK nucleoprotein mRNA, 5' end
2877	15495	27965	1.25	0.0E+00	BE154504.1	EST_HUMAN	PMO-HT0343-281299-003-e02 HT0343 Homo sapiens cDNA
2877	15495	27966	1.25	0.0E+00	BE154504.1	EST_HUMAN	PMO-HT0343-281299-003-e02 HT0343 Homo sapiens cDNA
2879	15497		1	0.0E+00	X73428.1	NT	H. sapiens lds gene for HLH type transcription factor
2881	15499		2.76	0.0E+00	AL163268.2	NT	Homo sapiens chromosome 21 segment HS21C068
2882	15500	27969	1.01	0.0E+00	7019584	NT	Homo sapiens zinc finger protein 221 (ZNF221), mRNA
2882	15500	27970	1.01	0.0E+00	7019584	NT	Homo sapiens zinc finger protein 221 (ZNF221), mRNA
2882	15500	27971	1.01	0.0E+00	7019584	NT	Homo sapiens zinc finger protein 221 (ZNF221), mRNA
2884	15502	27972	2.39	0.0E+00	M98478.1	NT	Human transglutaminase mRNA, complete cds
2888	15505	27975	15.68	0.0E+00	D50857.1	NT	Homo sapiens gamma-cytoplasmic actin (ACTGP3) pseudogene
2888	15505	27976	15.68	0.0E+00	D50857.1	NT	Homo sapiens gamma-cytoplasmic actin (ACTGP3) pseudogene
2891	15508	27979	1.95	0.0E+00	AL096857.1	NT	Novel human mRNA from chromosome 1, which has similarities to BAT2 genes
2892	15509		7.43	0.0E+00	Y10858.1	NT	H. sapiens mRNA for nuclear DNA helicase II
2893	15510		1.17	0.0E+00	AF152303.1	NT	Homo sapiens protocadherin alpha C1 (PCDH-alpha-C1) mRNA, complete cds
2894	15511	27980	112.87	0.0E+00	4503470	NT	Homo sapiens eukaryotic translation elongation factor 1 alpha 1 (EEF1A1) mRNA
2894	15511	27981	112.87	0.0E+00	4503470	NT	Homo sapiens eukaryotic translation elongation factor 1 alpha 1 (EEF1A1) mRNA
2904	15521	27991	2.88	0.0E+00	4507280	NT	Homo sapiens serine/threonine kinase 9 (STK9) mRNA
2907	15524	27995	1.03	0.0E+00	AL047599.1	EST_HUMAN	DKFZp586G0621_1 586 (synonym: hule1) Homo sapiens cDNA clone DKFZp586G0621
2908	15525	27996	1.64	0.0E+00	7661883	NT	Homo sapiens KIAA0054 gene product, Helicase (KIAA0054), mRNA
2908	15525	27997	1.64	0.0E+00	7661883	NT	Homo sapiens KIAA0054 gene product, Helicase (KIAA0054), mRNA

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2809	15528		2.8	0.0E+00	4503098	NT	Homo sapiens chondroitin sulfate proteoglycan 4 (melanoma-associated) (CSPG4), mRNA
2812	15528	27899	6.04	0.0E+00	BE081896.1	EST_HUMAN	QV2-BT0636-130400-138-h03 BT0636 Homo sapiens cDNA
2812	15528	28000	6.04	0.0E+00	BE081896.1	EST_HUMAN	QV2-BT0636-130400-138-h03 BT0636 Homo sapiens cDNA
2818	15535	28008	0.71	0.0E+00	6806918	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
2818	15535	28009	0.71	0.0E+00	6806918	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
2821	15538	28013	2.25	0.0E+00	AL163206.2	NT	Homo sapiens chromosome 21 segment HS21C006
2821	15538	28014	2.25	0.0E+00	AL163206.2	NT	Homo sapiens chromosome 21 segment HS21C006
2822	15539	28015	1.29	0.0E+00	AA215579.1	EST_HUMAN	z98b11.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:683517 3' similar to contains Alu repetitive element;
2829	15545		4.1	0.0E+00	Y19210.1	NT	Homo sapiens hHb5 gene for hair keratin, exons 1 to 9
2832	15548	28024	1.24	0.0E+00	4758278	NT	Homo sapiens Epha4 (EPHA4) mRNA
2834	15560	28027	41.84	0.0E+00	4503470	NT	Homo sapiens eukaryotic translation elongation factor 1 alpha 1 (EEF1A1) mRNA
2836	15562	28029	1.65	0.0E+00	P52740	SWISSPROT	ZINC FINGER PROTEIN 132
2837	15563	28030	1.25	0.0E+00	AF152338.1	NT	Homo sapiens protocadherin gamma C4 (PCDH-gamma-C4) mRNA, complete cds
2846	15562	28037	0.82	0.0E+00	A1209084.1	EST_HUMAN	ig49f04.x1 Scores, tests, NHT Homo sapiens cDNA clone IMAGE:1838527 3' similar to SW/GB20_HUMAN PS2298 20 KD NUCLEAR CAP BINDING PROTEIN ;
2854	15570	28045	1.78	0.0E+00	AB033083.1	NT	Homo sapiens mRNA for KIAA1267 protein, partial cds
2854	15570	28046	1.78	0.0E+00	AB033083.1	NT	Homo sapiens mRNA for KIAA1267 protein, partial cds
2855	15571	28047	6.84	0.0E+00	AB040941.1	NT	Homo sapiens mRNA for KIAA1508 protein, partial cds
2855	15571	28048	6.84	0.0E+00	AB040941.1	NT	Homo sapiens mRNA for KIAA1508 protein, partial cds
2858	15574	28051	3.14	0.0E+00	7661903	NT	Homo sapiens KIAA0100 gene product (KIAA0100), mRNA
2858	15574	28052	3.14	0.0E+00	7661903	NT	Homo sapiens KIAA0100 gene product (KIAA0100), mRNA
2859	15575	28053	3.48	0.0E+00	5174574	NT	Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (bithorax (Drosophila) homolog); translocated to, 4 (MLLT4) mRNA
2859	15575	28054	3.48	0.0E+00	5174574	NT	Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (bithorax (Drosophila) homolog); translocated to, 4 (MLLT4) mRNA
2864	15579	28058	1.12	0.0E+00	BF110702.1	EST_HUMAN	7n4d003.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3587028 3' similar to TR:Q9VLN1
2864	15579	28059	1.12	0.0E+00	BF110702.1	EST_HUMAN	Q9VLN1 CG17293 PROTEIN ;
2872	15588	28070	2.96	0.0E+00	4505084	NT	7n4d003.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3587028 3' similar to TR:Q9VLN1
2872	15588	28071	2.96	0.0E+00	4505084	NT	Q9VLN1 CG17293 PROTEIN ;
2881	15597	28077	1.82	0.0E+00	4758827	NT	Homo sapiens melanoma antigen, family B, 4 (MAGEB4), mRNA
2881	15597	28077	1.82	0.0E+00	4758827	NT	Homo sapiens melanoma antigen, family B, 4 (MAGEB4), mRNA
2885	15601	28080	1.33	0.0E+00	X15308.1	NT	Homo sapiens neuron III (NRXN3) mRNA
2885	15601	28080	1.33	0.0E+00	X15308.1	NT	H. sapiens NF-H gene, exon 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2985	15601	28081	1.33	0.0E+00	X16309.1	NT	H. sapiens NF-H gene, exon 4
2987	15603	28083	9.28	0.0E+00	AF108276.1	NT	Homo sapiens immunoglobulin-like transcript 1c variant 4 (ILT1c) gene, exon 6
3001	15617		1.28	0.0E+00	A1149880.1	EST_HUMAN	qf43f09.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1752809.3
3009	15625	28103	0.72	0.0E+00	AF281074.1	NT	Homo sapiens neuropilin 2 (NRP2) gene, complete cds, alternatively spliced
3009	15625	28104	0.72	0.0E+00	AF281074.1	NT	Homo sapiens neuropilin 2 (NRP2) gene, complete cds, alternatively spliced
3010	15626	28105	1.24	0.0E+00	4506118	NT	Homo sapiens prospero-related homeobox 1 (PROX1) mRNA
3011	15627	28108	2.29	0.0E+00	AB004884.1	NT	Homo sapiens mRNA for PKU-alpha, partial cds
3023	15639	28118	1.93	0.0E+00	7662273	NT	Homo sapiens KIAA0737 gene product (KIAA0737), mRNA
3025	15641	28118	2.52	0.0E+00	5729755	NT	Homo sapiens calcium channel, voltage-dependent, gamma subunit 3 (CACNG3), mRNA
3025	15641	28119	2.52	0.0E+00	5729755	NT	Homo sapiens calcium channel, voltage-dependent, gamma subunit 3 (CACNG3), mRNA
3036	15652	28130	1.45	0.0E+00	AF114488.1	NT	Homo sapiens intersectin short isoform (ITSN), complete cds
3036	15652	28131	1.45	0.0E+00	AF114488.1	NT	Homo sapiens intersectin short isoform (ITSN), complete cds
3060	15676		0.73	0.0E+00	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
3062	15678	28152	1.4	0.0E+00	M74099.1	NT	Human displacement protein (GCAAT) mRNA
3072	15687	28159	0.72	0.0E+00	4506892	NT	Homo sapiens semenogelin I (SEMG1) mRNA
3075	15690	28163	0.68	0.0E+00	AW976268.1	EST_HUMAN	EST388375 MAGE resequences, MAGN Homo sapiens cDNA
3080	15695		3.98	0.0E+00	AF195953.1	NT	Homo sapiens membrane-bound aminopeptidase P (XNPEP2) gene, complete cds
3083	15698	28171	20.17	0.0E+00	5579469	NT	Homo sapiens heat shock 70kD protein 1 (HSPA1A), mRNA
3083	15698	28172	20.17	0.0E+00	5579469	NT	Homo sapiens heat shock 70kD protein 1 (HSPA1A), mRNA
3085	15700		7.12	0.0E+00	AL359403.1	NT	isoform 2 of a novel human mRNA from chromosome 22
3089	15704	28178	2.78	0.0E+00	AF017433.1	NT	Homo sapiens putative transcription factor GR53 (GR53) mRNA, partial cds
							Homo sapiens transcription factor IGHM enhancer 3, JM11 protein, JM4 protein, JM5 protein, T54 protein, JM10 protein, A4 differentiation-dependent protein, triple LIM domain protein 6, and synapophysin genes, complete cds; and L-type calcium channel a>
3092	15707		2.39	0.0E+00	AF196779.1	NT	Human germline gene 16.1 for Ig lambda L-chain C region (Igl-C16.1)
3112	15727	28198	3.45	0.0E+00	X03529.1	NT	Homo sapiens F-box protein FBL5 (FBL5) mRNA, complete cds
3118	15732		1.69	0.0E+00	AF198355.1	NT	Homo sapiens melanoma-associated antigen (MAGE-C1) gene, complete cds
3122	15736	28205	1.74	0.0E+00	AF084589.1	NT	Homo sapiens SWI-SNF complex protein p270 mRNA, partial cds
3140	15754	28221	3.56	0.0E+00	AF265208.1	NT	Homo sapiens SWI-SNF complex protein p270 mRNA, partial cds
3141	15755	28222	5.25	0.0E+00	AF149773.1	NT	Homo sapiens NOD1 protein (NOD1) gene, exons 1, 2, and 3
3146	15760	28226	4.35	0.0E+00	7662139	NT	Homo sapiens KIAA0469 gene product (KIAA0469), mRNA
3147	15761	28227	1.46	0.0E+00	AF042075.1	NT	Homo sapiens olfactory receptor-like protein (OLFR 42B) gene, OLFR 42B-9110 allele, partial cds
3175	15788	28260	3.49	0.0E+00	4826783	NT	Homo sapiens potassium voltage-gated channel, Shab-related subfamily, member 1 (KCNB1) mRNA
3185	15797	28269	48.14	0.0E+00	L20941.1	NT	Human ferritin heavy chain mRNA, complete cds

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3188	15800	28272	2.08	0.0E+00	AB011121.1	NT	Homo sapiens mRNA for KIAA0549 protein, partial cds
3188	15800	28273	2.08	0.0E+00	AB011121.1	NT	Homo sapiens mRNA for KIAA0549 protein, partial cds
3196	15808	28281	18.48	0.0E+00	T94870.1	EST_HUMAN	ye32103.s1 Stragene lung (#937210) Homo sapiens cDNA clone IMAGE:119453 3' similar to SP:S29539
3210	15822	28298	1.23	0.0E+00	BF243336.1	EST_HUMAN	S29539 BASIC PROTEIN, 28K - ;
3211	15823	28299	1.28	0.0E+00	AI968086.1	EST_HUMAN	601878507F1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:4107433 5'
3216	15828	28306	4.69	0.0E+00	X98922.1	NT	wu12h10.x1 NCL_CGAP_GC6 Homo sapiens cDNA clone IMAGE:2516803 3'
3216	15828	28307	4.69	0.0E+00	X98922.1	NT	H. sapiens mRNA for gamma-glutamyltransferase
3218	15830	28309	0.63	0.0E+00	AI685950.1	EST_HUMAN	H. sapiens mRNA for gamma-glutamyltransferase
3226	15838	28317	1.57	0.0E+00	4758827	NT	tu38g09.x1 NCL_CGAP_P28 Homo sapiens cDNA clone IMAGE:2253376 3' similar to SW:RASD_DICDI
3226	15838	28318	1.57	0.0E+00	4758827	NT	P03967 RAS-LIKE PROTEIN RASD ;
3233	15845	28325	10.75	0.0E+00	4504658	NT	Homo sapiens neuroxin III (NRXN3) mRNA
3234	15846	28326	0.92	0.0E+00	4507720	NT	Homo sapiens neuroxin III (NRXN3) mRNA
3234	15846	28327	0.92	0.0E+00	4507720	NT	Homo sapiens interleukin 1 receptor, type I (IL1R1) mRNA
3245	15857	28340	1	0.0E+00	AJ277892.1	NT	Homo sapiens titin (TTN) mRNA
3253	15865	28346	2.88	0.0E+00	M28699.1	NT	Homo sapiens titin (TTN) mRNA
3257	15869	28349	2.27	0.0E+00	4502098	NT	Homo sapiens partial TTN gene for titin
3263	15875	28357	0.96	0.0E+00	4758035	NT	Homo sapiens nuclear phosphoprotein B23 (NPM1) mRNA, complete cds
3263	15875	28358	0.96	0.0E+00	4758035	NT	Homo sapiens solute carrier family 25 (mitochondrial carrier, adenine nucleotide translocator), member 5 (SLC25A5), nuclear gene encoding mitochondrial protein, mRNA
3265	15877	28359	4.57	0.0E+00	AA774763.1	EST_HUMAN	Homo sapiens CREB binding protein (Rubinstein-Taybi syndrome) (CREBBP) mRNA
3273	15885	28367	4.14	0.0E+00	AF286598.1	NT	Homo sapiens CREB binding protein (Rubinstein-Taybi syndrome) (CREBBP) mRNA
3273	15885	28368	4.14	0.0E+00	AF286598.1	NT	ae87b11.s1 Stragene schizo brain S11 Homo sapiens cDNA clone IMAGE:971133 3'
3285	15896	28374	1.44	0.0E+00	4557590	NT	Homo sapiens angiotensin binding protein 1 mRNA, complete cds
3292	15903	28383	1.09	0.0E+00	4507720	NT	Homo sapiens angiotensin binding protein 1 mRNA, complete cds
3300	15911		0.96	0.0E+00	M65199.1	NT	Homo sapiens fibrillin 1 (Marfan syndrome) (FBN1) mRNA
						NT	Homo sapiens 43 processed pseudogene
3301	15912	28390	1.7	0.0E+00	AF019413.1	NT	Human connexin 43 processed pseudogene
3303	15914	28392	4.47	0.0E+00	AF055084.1	NT	Homo sapiens HLA class III region containing tenascin X (tenascin-X) gene, partial cds; cytochrome P450 21-hydroxylase (CYP21B), complement component C4 (C4B) G11, helicase (SKI2W), RD, complement factor B (Bf), and complement component C2 (C2) genes.>
3313	18001	28400	2.26	0.0E+00	4502014	NT	Homo sapiens very large G-protein coupled receptor-1 (VLGR1) mRNA, complete cds
3313	18001	28401	2.26	0.0E+00	4502014	NT	Homo sapiens A kinase (PRKA) anchor protein 1 (AKAP1) mRNA
3328	15939	28415	2.57	0.0E+00	AF265208.1	NT	Homo sapiens A kinase (PRKA) anchor protein 1 (AKAP1) mRNA
						NT	Homo sapiens SWI-SNF complex protein p270 mRNA, partial cds

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3330	15940	28418	1.68	0.0E+00	8923624	NT	Homo sapiens hypothetical protein FLJ20695 (FLJ20695), mRNA
3355	15963	28440	1.02	0.0E+00	4885312	NT	Homo sapiens G protein-coupled receptor 24 (GPR24), mRNA
3368	15974	28451	5.6	0.0E+00	AI589294.1	EST_HUMAN	U58108.x2 NCI CGAP_Pan1 Homo sapiens cDNA clone IMAGE:222535 3' similar to SW:RL11_RAT
3369	15977	28454	1.4	0.0E+00	AW955400.1	EST_HUMAN	P25121 60S RIBOSOMAL PROTEIN L11, contains Alu repetitive element;
3374	15983	28460	2.28	0.0E+00	AF128893.1	NT	EST367470 MAGE resequences, MAGD Homo sapiens cDNA
3374	15983	28461	2.28	0.0E+00	AF128893.1	NT	Homo sapiens telomerase reverse transcriptase (TERT) gene, exons 1-6
3375	15984	28462	0.91	0.0E+00	7657213	NT	Homo sapiens telomerase reverse transcriptase (TERT) gene, exons 1-8
3375	15984	28463	0.91	0.0E+00	7657213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
3378	15987	28465	1.23	0.0E+00	4502582	NT	Homo sapiens caspase 8, apoptosis-related cysteine protease (CASP8), mRNA
3378	15987	28466	1.23	0.0E+00	4502582	NT	Homo sapiens caspase 8, apoptosis-related cysteine protease (CASP8), mRNA
3382	15991	28469	13.03	0.0E+00	AF111163.1	NT	Homo sapiens pyrin (MEFV) gene, complete cds
3384	15993	28471	0.89	0.0E+00	AB040940.1	NT	Homo sapiens mRNA for KIAA1507 protein, partial cds
3403	16012	28491	1.08	0.0E+00	AI632569.1	EST_HUMAN	wb1004.x1 NCI CGAP_GC6 Homo sapiens cDNA clone IMAGE:2305279 3' similar to TR:Q91929 Q91929
3443	16051	28529	3.18	0.0E+00	AU123684.1	EST_HUMAN	ZINC FINGER PROTEIN, ;
3450	16057	28532	0.94	0.0E+00	7363436	NT	AU123684 NT2RM2 Homo sapiens cDNA clone NT2RM2000735 5'
3450	16057	28533	0.94	0.0E+00	7363436	NT	Homo sapiens olfactory receptor, family 10, subfamily C, member 1 (OR10C1), mRNA
3453	16060	28535	1.88	0.0E+00	7706239	NT	Homo sapiens olfactory receptor, family 10, subfamily C, member 1 (OR10C1), mRNA
3454	16061	28536	1.04	0.0E+00	AF211189.1	NT	Homo sapiens neuroblastoma-amplified protein (LOC51594), mRNA
3458	16065	28550	1.03	0.0E+00	AW967015.1	EST_HUMAN	Homo sapiens T-type calcium channel alpha1 subunit Alpha1-a isoform (CACNA1I) mRNA, complete cds
3471	16077	28551	1.28	0.0E+00	7662401	NT	MIR1-SN0033-100400-001-c08 SN0033 Homo sapiens cDNA
3471	16077	28551	1.28	0.0E+00	7662401	NT	Homo sapiens KIAA0952 protein (KIAA0952), mRNA
3472	16078	28552	1.05	0.0E+00	4502398	NT	Homo sapiens KIAA0952 protein (KIAA0952), mRNA
3475	16081	28554	1.72	0.0E+00	5803067	NT	Homo sapiens beaded filament structural protein 1, filensin (BFSP1) mRNA
3484	15313	27879	1.56	0.0E+00	AF110763.1	NT	Homo sapiens leukocyte immunoglobulin-like receptor, subfamily A (with TM domain), member 2 (LILRA2), mRNA
3489	16094	28567	2.38	0.0E+00	7657038	NT	Homo sapiens skeletal muscle LIM-protein 1 (FHL1) gene, complete cds
3490	16095	28568	0.97	0.0E+00	5453965	NT	Homo sapiens death receptor 6 (DR6), mRNA
3490	16095	28569	0.97	0.0E+00	5453965	NT	Homo sapiens protein kinase, AMP-activated, alpha 2 catalytic subunit (PRKAA2) mRNA
3493	16098	28573	5.92	0.0E+00	K02380.1	NT	Homo sapiens protein kinase, AMP-activated, alpha 2 catalytic subunit (PRKAA2) mRNA
3495	16100	28575	1.2	0.0E+00	7427522	NT	Bacteriophage P1 replication region including repA, parA, and parB genes and IncA, IncB, and IncC incompatibility determinants
							Homo sapiens protein tyrosine phosphatase, receptor type, T (PTPRT), mRNA

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3497	16102	28577	1	0.0E+00	4557748	NT	Homo sapiens met proto-oncogene (hepatocyte growth factor receptor) (MET) mRNA
3501	16106	28581	3.89	0.0E+00	A1935159.1	EST_HUMAN	wp14d10.x1 NCI_OGAP_Lu19 Homo sapiens cDNA clone IMAGE:2484819 3' similar to TR:O73634 O73634
3501	16106	28582	3.89	0.0E+00	A1935159.1	EST_HUMAN	NEURAL CELL ADHESION MOLECULE.:
3505	16110	28587	2.13	0.0E+00	AJ278120.1	NT	wp14d10.x1 NCI_OGAP_Lu19 Homo sapiens cDNA clone IMAGE:2484819 3' similar to TR:O73634 O73634
3508	16111	28588	1.12	0.0E+00	7706378	NT	NEURAL CELL ADHESION MOLECULE.:
3512	16117	28596	2.09	0.0E+00	8552332	NT	Homo sapiens mRNA for putative erythrin-repeat containing protein (OREF1)
3512	16117	28597	2.09	0.0E+00	8552332	NT	Homo sapiens ASB-4 protein (LOC51666), mRNA
3518	16123	28603	1.4	0.0E+00	M14123.1	NT	Homo sapiens v-fos FBJ murine osteosarcoma viral oncogene homolog (FOS), mRNA
3523	16128	28608	6.45	0.0E+00	U43293.1	NT	Homo sapiens v-fos FBJ murine osteosarcoma viral oncogene homolog (FOS), mRNA
3528	16133	28612	0.84	0.0E+00	9558718	NT	Human endogenous retrovirus HERV-K10
3528	16133	28613	0.94	0.0E+00	9558718	NT	Human MDS1A (AML1/MDS1 fusion) mRNA, partial cds
3532	16137	28618	2.45	0.0E+00	AF045452.1	NT	Homo sapiens hypothetical protein (AF038169), mRNA
3532	16137	28619	2.45	0.0E+00	AF045452.1	NT	Homo sapiens cell-line KG1 transcriptional regulatory protein p54 mRNA, complete cds
3540	16145	28628	1.19	0.0E+00	AF231922.1	NT	Homo sapiens cell-line KG1 transcriptional regulatory protein p54 mRNA, complete cds
3547	16151	28631	0.95	0.0E+00	AA626677.1	EST_HUMAN	Homo sapiens chromosome 21 unknown mRNA
3547	16151	28632	0.95	0.0E+00	AA626677.1	EST_HUMAN	ab51112.r1 Strategene lung carcinoma 937218 Homo sapiens cDNA clone IMAGE:844387 5'
3547	16151	28633	0.95	0.0E+00	AA626677.1	EST_HUMAN	ab51112.r1 Strategene lung carcinoma 937218 Homo sapiens cDNA clone IMAGE:844387 5'
3553	16157	28639	1.53	0.0E+00	BE304791.1	EST_HUMAN	ab51112.r1 Strategene lung carcinoma 937218 Homo sapiens cDNA clone IMAGE:844387 5'
3553	16157	28640	1.53	0.0E+00	BE304791.1	EST_HUMAN	601143853F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:3051373 5'
3556	16160	28643	2.51	0.0E+00	4503648	NT	Homo sapiens coagulation factor IX (plasma thromboplastic component, Christmas disease, hemophilia B) (F9) mRNA
3557	16161	28644	1.08	0.0E+00	4826795	NT	Homo sapiens potassium voltage-gated channel, Isk-related family, member 2 (KCNK2) mRNA
3560	16164	28647	1.58	0.0E+00	O14867	SWISSPROT	TRANSCRIPTION REGULATOR PROTEIN BACH1 (BTB AND CNC HOMOLOG 1) (HA2303)
3565	16169	28651	0.93	0.0E+00	A1384007.1	EST_HUMAN	ts3g12.x1 Soares_NIHMPu_S1 Homo sapiens cDNA clone IMAGE:2088742 3' similar to TR:O00498
3568	16172	28654	1.52	0.0E+00	M10976.1	NT	O00498 MYASTHENIA GRAVIS AUTOANTIGEN GRAVIN:
3585	16189	28672	0.74	0.0E+00	AA456282.1	EST_HUMAN	Human endogenous retroviral DNA (4-1), complete retroviral segment
3585	16189	28673	0.74	0.0E+00	AA456282.1	EST_HUMAN	z88h04.r1 Soares_NIHMPu_S1 Homo sapiens cDNA clone IMAGE:811927 5'
3594	16198	28681	1	0.0E+00	AV701869.1	EST_HUMAN	z88h04.r1 Soares_NIHMPu_S1 Homo sapiens cDNA clone IMAGE:811927 5'
3595	16199	28682	0.73	0.0E+00	4506884	NT	AV701869 ADB Homo sapiens cDNA clone ADBDAH06 5'
3597	16201	28690	1.47	0.0E+00	AF078868.1	NT	Homo sapiens semenogelin II (SEMG2) mRNA
3608	16210	28690	1.07	0.0E+00	AL133204.1	NT	Homo sapiens homologous yeast-44.2 protein mRNA, complete cds
							Novel human gene mapping to chromosome X

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3610	16213	28693	0.89	0.0E+00	AB040909.1	NT	Homo sapiens mRNA for KIAA1476 protein, partial cds
3622	16225	28703	1.1	0.0E+00	8923087	NT	Homo sapiens hypothetical protein FLJ20080 (FLJ20080), mRNA
3633	16238	28711	1.16	0.0E+00	6997248	NT	Homo sapiens sal (Drosophila)-like 1 (SALL1), mRNA
3633	16236	28712	1.16	0.0E+00	6997248	NT	Homo sapiens sal (Drosophila)-like 1 (SALL1), mRNA
3634	16237		1.14	0.0E+00	AI081907.1	EST_HUMAN	α77c11.x1 Soares_NHMPu_S1 Homo sapiens cDNA clone IMAGE:1662356 3' similar to WP.T1984.4 CE13742
3638	16239	28715	1.26	0.0E+00	8325463	NT	Homo sapiens butyrophilin, subfamily 3, member A3 (BTN3A3), mRNA
3641	16244		5.41	0.0E+00	AW852217.1	EST_HUMAN	QV0-CT0225-230300-169-e01 CT0225 Homo sapiens cDNA
3645	16248	28724	1.06	0.0E+00	4504294	NT	Homo sapiens H3 histone family, member K (H3FK), mRNA
3649	16252		1.74	0.0E+00	AF118846.1	NT	Homo sapiens gamma-glutamylcysteine synthetase (GLCLC) gene, partial cds
3650	16253	28725	8.35	0.0E+00	BF676393.1	EST_HUMAN	602084583F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4248596 5'
3653	16256		0.96	0.0E+00	AA988715.1	EST_HUMAN	oq94h08.s1 NCL_CGAP_Kid6 Homo sapiens cDNA clone IMAGE:1594043 3' similar to contains MER29.52 MER29 repetitive element
3663	16257	28737	0.9	0.0E+00	AW937977.1	EST_HUMAN	QV0-DT0047-170200-123-g01 DT0047 Homo sapiens cDNA
3675	16276	28743	0.8	0.0E+00	BF672054.1	EST_HUMAN	802152486F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4283845 5'
3675	16276	28744	0.8	0.0E+00	BF672054.1	EST_HUMAN	802152486F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4283845 5'
3676	16277		1.3	0.0E+00	4828987	NT	Homo sapiens retinoblastoma-binding protein 2 (RBBP2), mRNA
3678	16279	28746	0.96	0.0E+00	AW664693.1	EST_HUMAN	hi84g01.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2978024 3'
3678	16279	28747	0.96	0.0E+00	AW664693.1	EST_HUMAN	hi84g01.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2978024 3'
3682	16283	28751	0.8	0.0E+00	4828763	NT	Homo sapiens heparan sulfate (glucosamine) 3-O-sulfotransferase 1 (HS3ST1), mRNA
3684	16285	28754	0.81	0.0E+00	7682319	NT	Homo sapiens KIAA0806 gene product (KIAA0806), mRNA
3692	16293	28762	0.72	0.0E+00	4557752	NT	Homo sapiens midline 1 (Opitz/BBB syndrome) (MID1), mRNA
3692	16293	28763	0.72	0.0E+00	4557752	NT	Homo sapiens midline 1 (Opitz/BBB syndrome) (MID1), mRNA
3709	16310	28777	1.47	0.0E+00	D87327.1	NT	Homo sapiens mRNA for G protein-coupled inward rectifier potassium channel, complete cds
3712	16313		20.4	0.0E+00	7669491	NT	Homo sapiens glyceraldehyde-3-phosphate dehydrogenase (GAPD), mRNA
3730	16331	28797	2.49	0.0E+00	AB026542.1	NT	Homo sapiens WAVE2 mRNA for WASP-family protein, complete cds
3732	16333	28799	0.93	0.0E+00	AB007868.2	NT	Homo sapiens mRNA for KIAA0408 protein, partial cds
3734	16335	28800	2.92	0.0E+00	AF124250.1	NT	Homo sapiens SH2-containing protein Nsp2 mRNA, complete cds
3734	16335	28801	2.92	0.0E+00	AF124250.1	NT	Homo sapiens SH2-containing protein Nsp2 mRNA, complete cds
3739	16340	28807	2.63	0.0E+00	AA852743.1	EST_HUMAN	NHTBCae15g09f1 Normal Human Trabecular Bone Cells Homo sapiens cDNA clone NHTBCae15g09
3739	16340	28808	2.63	0.0E+00	AA852743.1	EST_HUMAN	NHTBCae15g09f1 Normal Human Trabecular Bone Cells Homo sapiens cDNA clone NHTBCae15g09
3743	16344	28811	1.66	0.0E+00	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21G004

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3743	16344	28812	1.66	0.0E+00	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
3746	16347	28815	1.08	0.0E+00	AW851714.1	EST_HUMAN	MR2.CT0222-281099-005-e05 CT0222 Homo sapiens cDNA
3748	16349	28817	1.4	0.0E+00	5728928	NT	Homo sapiens matrix metalloproteinase 24 (membrane-inserted) (MMP24), mRNA
3750	16351	28819	1.23	0.0E+00	AB018339.1	NT	Homo sapiens mRNA for KIAA0796 protein, partial cds
3752	16353	28821	1.56	0.0E+00	O14867	SWISSPROT	TRANSCRIPTION REGULATOR PROTEIN BACH1 (BTB AND CNC HOMOLOG 1) (HA2303)
3754	16355	28823	0.83	0.0E+00	AB020717.1	NT	Homo sapiens mRNA for KIAA0910 protein, partial cds
3754	16355	28824	0.83	0.0E+00	AB020717.1	NT	Homo sapiens mRNA for KIAA0910 protein, partial cds
3767	16368	28833	4.72	0.0E+00	AW298134.1	EST_HUMAN	UI-H-BW0-ajs-e-12-Q-UI.s1 NCL CGAP_Sub6 Homo sapiens cDNA clone IMAGE:2733022 3'
3767	16368	28834	4.72	0.0E+00	AW298134.1	EST_HUMAN	UI-H-BW0-ajs-e-12-Q-UI.s1 NCL CGAP_Sub6 Homo sapiens cDNA clone IMAGE:2733022 3'
3792	16392	28857	1.06	0.0E+00	AB004630.1	NT	Human gene for Type XIX collagen $\alpha 1$ chain, exon 6
3793	16393	28858	0.87	0.0E+00	AA463659.1	EST_HUMAN	aa09g01.1 Soares_NHMPu_S1 Homo sapiens cDNA clone IMAGE:812486 5' similar to SW:KRBA_SHEEP P02445 KERATIN, HIGH-SULFUR MATRIX PROTEIN, IIB4. (1) :
3798	16398	28863	1.04	0.0E+00	AB020710.1	NT	Homo sapiens mRNA for KIAA0903 protein, partial cds
3801	16401	28865	4.05	0.0E+00	7657468	NT	Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1), mRNA
3810	16409	28874	0.95	0.0E+00	AB037835.1	NT	Homo sapiens mRNA for KIAA1414 protein, partial cds
3823	16423	28885	7.87	0.0E+00	7662183	NT	Homo sapiens KIAA0569 gene product (KIAA0569), mRNA
3826	16426	28888	23.27	0.0E+00	4506718	NT	Homo sapiens ribosomal protein S2 (RPS2) mRNA
3834	16433	28894	1.04	0.0E+00	7657065	NT	Homo sapiens v-ets avian erythroblastosis virus E26 oncogene related (ERG), mRNA
3834	16433	28895	1.04	0.0E+00	7657065	NT	Homo sapiens v-ets avian erythroblastosis virus E26 oncogene related (ERG), mRNA
3873	16471	28935	0.92	0.0E+00	7661867	NT	Homo sapiens KIAA0022 gene product (KIAA0022), mRNA
3873	16471	28936	0.92	0.0E+00	7661867	NT	Homo sapiens KIAA0022 gene product (KIAA0022), mRNA
3892	16491	28951	2.65	0.0E+00	AF179733.1	NT	Pan troglodytes olfactory receptor (PTR208) gene, partial cds
3896	16495	28956	1.55	0.0E+00	7657468	NT	Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1), mRNA
3898	16495	28957	1.55	0.0E+00	7657468	NT	Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1), mRNA
3900	16499	28962	1.35	0.0E+00	A1377696.1	EST_HUMAN	166210.Xt Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2081307 3'
3901	16500		1.09	0.0E+00	AF152496.1	NT	Homo sapiens protocadherin beta 3 (PCDH-beta3) mRNA, complete cds
3902	16501	28963	2.32	0.0E+00	4758198	NT	Homo sapiens desmoplakin (DPI, DPII) (DSP) mRNA
3905	16504	28966	10.94	0.0E+00	S78685.1	NT	Homo sapiens A TP-sensitive inwardly rectifying K-channel subunit (KCNJ6/BIR1) gene, complete cds
3906	16505	28967	2.15	0.0E+00	7710148	NT	Homo sapiens methyl CpG binding protein 2 (MECP2), mRNA
3907	16506	28968	2.69	0.0E+00	7662183	NT	Homo sapiens KIAA0569 gene product (KIAA0569), mRNA
3910	16509	28970	1.1	0.0E+00	AF069601.2	NT	Homo sapiens myosin light chain kinase isoform 2 (MLCK) mRNA, complete cds
3910	16509	28971	1.1	0.0E+00	AF069601.2	NT	Homo sapiens myosin light chain kinase isoform 2 (MLCK) mRNA, complete cds
3916	16514	28977	0.84	0.0E+00	6912735	NT	Homo sapiens transient receptor potential channel 5 (TRPC5), mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3921	16519	28985	6.15	0.0E+00	4503178	NT	Homo sapiens chromosome X open reading frame 5 (CXORF5) mRNA
3921	16519	28988	6.15	0.0E+00	4503178	NT	Homo sapiens chromosome X open reading frame 5 (CXORF5) mRNA
3923	16521	28989	4.15	0.0E+00	U09412.1	NT	Human zinc finger protein ZNF134 mRNA, complete cds
3924	16522	28990	32.21	0.0E+00	AF114488.1	NT	Homo sapiens intersechin short isoform (ITSN) mRNA, complete cds
3927	16525	28992	1.46	0.0E+00	4828783	NT	Homo sapiens potassium voltage-gated channel, Shab-related subfamily, member 1 (KCNB1) mRNA
3930	16528	28995	1.1	0.0E+00	AF012615.1	NT	Homo sapiens familial mental retardation protein 2 (FMR2) gene, exon 11
3931	16529	28996	1.93	0.0E+00	4759171	NT	Homo sapiens SC35-interacting protein 1 (SRRP129) mRNA
3933	16531	28998	1.09	0.0E+00	AF099117.1	NT	Homo sapiens amphiphysin gene, partial cds
3944	16542	29009	2.45	0.0E+00	AI864727.1	EST_HUMAN	wk01101.x1 NCJ CGAP_Lym12 Homo sapiens cDNA clone IMAGE:2411065 3' similar to TR:O43340
3947	16545	29013	16.56	0.0E+00	4506742	NT	O43340 R28830_2, contains element PTR7 repetitive element;
3952	16550	29019	1.8	0.0E+00	AL040338.1	EST_HUMAN	Homo sapiens ribosomal protein S8 (RPS8) mRNA
3957	16555	29025	1.03	0.0E+00	6005887	NT	DKFZp434N0413_r1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434N0413 5'
3957	16555	29026	1.03	0.0E+00	6005887	NT	Homo sapiens API gamma subunit binding protein 1 (APIGBP1) mRNA
3958	16556	29027	2.86	0.0E+00	4504138	NT	Homo sapiens glutamate receptor, metabotropic 3 (GRM3) mRNA
3960	16558		2.2	0.0E+00	4505078	NT	Homo sapiens melanoma antigen, family B, 1 (MAGEB1) mRNA
3964	16562	29031	1.02	0.0E+00	AF149412.1	NT	Homo sapiens HBP17 heparin-binding and FGF-binding protein gene, complete cds
3975	16573	29043	1.92	0.0E+00	4506758	NT	Homo sapiens ryanodine receptor 3 (RYR3) mRNA
3979	16577	29047	1.81	0.0E+00	4585842	NT	Homo sapiens zinc finger protein (KIAA0412) mRNA
3988	16586	29057	1.88	0.0E+00	BF355295.1	EST_HUMAN	RC3-HT0860-170800-011-a12 HT0860 Homo sapiens cDNA
3990	16588	29059	1.04	0.0E+00	AW888221.1	EST_HUMAN	MXRA5 Human matrix tissue expression library Homo sapiens cDNA clone Incyte 1996726 similar to MXRA5
3990	16588	29060	1.04	0.0E+00	AW888221.1	EST_HUMAN	Matrix remodeling associated gene 5
3998	16596	29068	2.84	0.0E+00	AF129533.1	NT	MXRA5 Human matrix tissue expression library Homo sapiens cDNA clone Incyte 1996726 similar to MXRA5
4001	16599	29071	1.06	0.0E+00	U86281.1	NT	Homo sapiens F-box protein Fbx3b (FBL3B) mRNA, partial cds
4001	16599	29072	1.06	0.0E+00	U86281.1	NT	Homo sapiens olfactory receptor (OR7-141) gene, partial cds
4006	16604	29078	4.1	0.0E+00	BE378602.1	EST_HUMAN	Homo sapiens olfactory receptor (OR7-141) gene, partial cds
4014	16612	29085	1.28	0.0E+00	AW580740.1	EST_HUMAN	601236866F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3608800 5'
4047	16644	29110	13.52	0.0E+00	AF116195.1	NT	PM3-LT0031-100700-003-H09 LT0031 Homo sapiens cDNA
4047	16644	29111	13.52	0.0E+00	AF116195.1	NT	Homo sapiens cancer-testis antigen CT10 (CT10) gene, complete cds
4057	16654		4.5	0.0E+00	M23910.1	NT	Homo sapiens cancer-testis antigen CT10 (CT10) gene, complete cds
4059	16656		6.04	0.0E+00	AL163303.2	NT	Human MHC class II lymphocyte antigen DPw4-beta-2 pseudogene, exon 2
							Homo sapiens chromosome 21 segment HS21C103

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Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4085	16662	29124	1.23	0.0E+00	AL118494.1	NT	Novel human gene mapping to chromosome 20
4089	16665	29126	3.49	0.0E+00	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
4077	16673	29134	2.12	0.0E+00	AL163288.2	NT	Homo sapiens chromosome 21 segment HS21C088
4090	16688		60.86	0.0E+00	4503470	NT	Homo sapiens eukaryotic translation elongation factor 1 alpha 1 (EEF1A1) mRNA
4098	16693	29150	1.89	0.0E+00	U09366.1	NT	Human zinc finger protein ZNF133
4120	16713	29169	10.72	0.0E+00	AB015610.1	NT	Chlorococcus aethiops mRNA for ribosomal protein S4X, complete cds
4130	16722		3.27	0.0E+00	AJ238617.1	NT	Homo sapiens mRNA for UGA suppressor RNA-associated antigenic protein (RNA48 gene)
4140	16732	29185	1.61	0.0E+00	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
4141	16733	29186	2.96	0.0E+00	AJ277276.1	NT	Homo sapiens mRNA for rapa-2 (rapa gene)
4141	16733	29187	2.96	0.0E+00	AJ277276.1	NT	Homo sapiens mRNA for rapa-2 (rapa gene)
4148	16740	29193	8.52	0.0E+00	5032026	NT	Homo sapiens retinoblastoma-binding protein 4 (RBBP4) mRNA
4148	16740	29194	8.52	0.0E+00	5032026	NT	Homo sapiens retinoblastoma-binding protein 4 (RBBP4) mRNA
4158	16750	29203	0.98	0.0E+00	4503914	NT	Homo sapiens phosphoribosylglycinamide formyltransferase, phosphoribosylglycinamide synthetase, phosphoribosylaminimidazole synthetase (GART) mRNA
4164	16755	29207	7.55	0.0E+00	4895306	NT	Homo sapiens G protein-coupled receptor 21 (GPR21), mRNA
4165	16756	29208	4.94	0.0E+00	AB006625.1	NT	Homo sapiens mRNA for KIAA0287 gene, partial cds
4168	16769	29209	0.68	0.0E+00	4758907	NT	Homo sapiens ras GTPase activating protein-like (NGAP) mRNA
4169	16760	29210	6.82	0.0E+00	11419287	NT	Homo sapiens IMP (inosine monophosphate) dehydrogenase 1 (IMPDH1), mRNA
4170	16761	29211	2.88	0.0E+00	AL098857.1	NT	Novel human mRNA from chromosome 1, which has similarities to BAT2 genes
4171	16762		1.11	0.0E+00	AA018975.1	EST_HUMAN	ze55608.r1 Scores retina N2b-HR Homo sapiens cDNA clone IMAGE:362920 5' similar to contains Alu repetitive element
4178	16769	29218	3.61	0.0E+00	AF165527.1	NT	Homo sapiens DGCR8 (DGCR8) mRNA, complete cds
4189	13773	29282	0.76	0.0E+00	4826947	NT	Homo sapiens protein kinase, X-linked (PRKX) mRNA
4189	13773	29283	0.76	0.0E+00	4826947	NT	Homo sapiens protein kinase, X-linked (PRKX) mRNA
4185	16785	29233	2.14	0.0E+00	5901905	NT	Homo sapiens butyrophilin, subfamily 3, member A2 (BTN3A2), mRNA
4186	16786	29234	1.21	0.0E+00	4503854	NT	Homo sapiens GA-binding protein transcription factor, alpha subunit (80kD) (GABPA), mRNA
4198	16786	29235	1.21	0.0E+00	4503854	NT	Homo sapiens GA-binding protein transcription factor, alpha subunit (80kD) (GABPA), mRNA
4198	16786	29235	1.21	0.0E+00	4503854	NT	Homo sapiens GA-binding protein transcription factor, alpha subunit (80kD) (GABPA), mRNA
4198	16789	29237	0.57	0.0E+00	4508884	NT	Homo sapiens senenogelin II (SEMG2) mRNA
4200	16789	29237	1.35	0.0E+00	8922391	NT	Homo sapiens hypothetical protein FLJ10379 (FLJ10379), mRNA
4200	16789	29238	1.35	0.0E+00	8922391	NT	Homo sapiens hypothetical protein FLJ10379 (FLJ10379), mRNA
4206	16785	29242	0.59	0.0E+00	AB020702.1	NT	Homo sapiens mRNA for KIAA0895 protein, partial cds
4213	16802	29251	18.39	0.0E+00	AI982597.1	EST_HUMAN	Homo sapiens mRNA for KIAA0895 protein, partial cds
4213	16802	29252	18.39	0.0E+00	AI982597.1	EST_HUMAN	wu04404.x1 NCI_CGAP_G06 Homo sapiens cDNA clone IMAGE:2515975 3'
4216	16804	29254	1.08	0.0E+00	BE184856.1	EST_HUMAN	MR1-HT0707-100500-001-e02 HT0707 Homo sapiens cDNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4216	16804	29255	1.08	0.0E+00	BE184856.1	EST_HUMAN	MR1-HT0707-100500-001-a02 HT0707 Homo sapiens cDNA
4221	16809		3.97	0.0E+00	BE274217.1	EST_HUMAN	601120778F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:2987690 5'
4227	16815	29262	1.12	0.0E+00	AB032951.1	NT	Homo sapiens mRNA for KIAA1125 protein, partial cds
4227	16815	29263	1.12	0.0E+00	AB032951.1	NT	Homo sapiens mRNA for KIAA1125 protein, partial cds
4229	16817	29265	2.51	0.0E+00	5729725	NT	Homo sapiens nuclear receptor coactivator 3 (NCOA3), mRNA
4236	16824		5.9	0.0E+00	AW875699.1	EST_HUMAN	ba51f04.x1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:2900095 3' similar to SW:TH12_BOVIN
4241	16829	29278	1.14	0.0E+00	AW408788.1	EST_HUMAN	Q95108 MITOCHONDRIAL THIOREDOXIN PRECURSOR ;
4242	16830	29280	1.64	0.0E+00	8922466	NT	U1-HF-BMO-adv-c-02-0-J11 NIH_MGC_38 Homo sapiens cDNA clone IMAGE:3063147 5'
4242	16830	29281	1.64	0.0E+00	8922466	NT	Homo sapiens hypothetical protein FLJ10498 (FLJ10498), mRNA
4251	16839		2.08	0.0E+00	5174832	NT	Homo sapiens polycystic kidney disease (polycystin) and REJ (sperm receptor for egg jelly, sea urchin homolog)-like (PKDREJ) mRNA
4263	16849	29287	1.06	0.0E+00	AB037739.1	NT	Homo sapiens mRNA for KIAA1318 protein, partial cds
4270	16856	29303	10.06	0.0E+00	AA401438.1	EST_HUMAN	zu68h07.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:743197 3' similar to contains Alu repetitive element; contains element MER35 repetitive element ;
4270	16856		10.06	0.0E+00	AA401438.1	EST_HUMAN	zu68h07.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:743197 3' similar to contains Alu repetitive element; contains element MER35 repetitive element ;
4273	16859	29308	1.01	0.0E+00	AF157476.1	NT	Homo sapiens DNA polymerase zeta catalytic subunit (REV3) mRNA, complete cds
4286	16872	29319	1.02	0.0E+00	4507720	NT	Homo sapiens tbin (TTN) mRNA
4286	16872	29320	1.02	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
4301	16887	29331	1.09	0.0E+00	7661869	NT	Homo sapiens KIAA0173 gene product (KIAA0173), mRNA
4305	16891	29333	1.6	0.0E+00	4756199	NT	Homo sapiens desmoplakin (DPI, DPII) (DSP) mRNA
4305	16891	29334	1.6	0.0E+00	4756199	NT	Homo sapiens desmoplakin (DPI, DPII) (DSP) mRNA
4314	16900		0.72	0.0E+00	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
4344	16931	29372	1.17	0.0E+00	AJ003145.1	NT	Homo sapiens hyperion gene, exons 1-50
4346	16933	29374	0.96	0.0E+00	AJ010770.1	NT	Homo sapiens mRNA for olfactory receptor protein, pseudogene
4360	16947	29389	17.92	0.0E+00	J02610.1	NT	Homo sapiens hyperion gene, exons 1-50
4375	16962	29408	0.84	0.0E+00	AW936989.1	EST_HUMAN	Human apolipoprotein B-100 mRNA, complete cds
4381	16968	29415	0.59	0.0E+00	4826827	NT	PM2-DT0023-080300-004-a08 DT0023 Homo sapiens cDNA
4381	16968	29416	0.59	0.0E+00	4826827	NT	Homo sapiens myelodysplasia syndrome 1 (MDS1) mRNA
4383	16970	29418	4.39	0.0E+00	AF174590.1	NT	Homo sapiens myelodysplasia syndrome 1 (MDS1) mRNA
4391	16977		2.19	0.0E+00	AI186844.1	EST_HUMAN	Homo sapiens F-box protein Fbx4 (FBL4) mRNA, partial cds
4395	16980		4.49	0.0E+00	U14520.1	NT	gd23f06.x1 Soares_placenta_8w6weeks_2Nbl-P81c9W Homo sapiens cDNA clone IMAGE:1724579 3' similar to contains MER20.b2 MER20 repetitive element ;
							Human CBFA3 (Cbfa3) gene, partial cds

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4399	16984	29429	0.84	0.0E+00	5174574	NT	Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (trithorax (Drosophila) homolog); translocated to, 4 (MLLT4) mRNA
4418	17003	29446	0.9	0.0E+00	6563384	NT	Homo sapiens protein kinase C, nu (PRKCN), mRNA
4418	17003	29447	0.9	0.0E+00	6563384	NT	Homo sapiens protein kinase C, nu (PRKCN), mRNA
4425	17010	29453	1.16	0.0E+00	U10991.1	NT	Human G2 protein mRNA, partial cds
4425	17010	29454	1.16	0.0E+00	U10991.1	NT	Human G2 protein mRNA, partial cds
4433	17019	29459	11.1	0.0E+00	6912281	NT	Homo sapiens COMPLEMENT COMPONENT C1q RECEPTOR (C1QR), mRNA
4451	17037		1.13	0.0E+00	AF153047.2	NT	Homo sapiens gap junction protein connexin-36 (CX36) gene, complete cds
4480	17048	29489	4.6	0.0E+00	L14561.1	NT	Homo sapiens plasma membrane calcium ATPase isoform 1 (ATP2B1) gene, alternative splice products, partial cds
4484	17050	29484	5.78	0.0E+00	Z80780.1	NT	Hi sapiens H2B/h gene
4484	17050	29495	5.78	0.0E+00	Z80780.1	NT	Hi sapiens H2B/h gene
4470	17058	29501	1.97	0.0E+00	X60483.1	NT	Hi sapiens H4/d gene for H4 histone
4470	17058	29502	1.97	0.0E+00	X60483.1	NT	Hi sapiens H4/d gene for H4 histone
4475	17060	29508	10.17	0.0E+00	7662091	NT	Homo sapiens KIAA0390 gene product (KIAA0390), mRNA
4475	17060	29509	10.17	0.0E+00	7662091	NT	Homo sapiens KIAA0390 gene product (KIAA0390), mRNA
4484	17069	29519	1.11	0.0E+00	X82338.1	NT	Homo sapiens Menkes disease gene, exon 4
4487	17072	29523	16.07	0.0E+00	4885128	NT	Homo sapiens caudal type homeo box transcription factor 4 (CDX4), mRNA
4488	17073	29524	1.73	0.0E+00	AJ271736.1	NT	Homo sapiens Xq pseudautosomal region; segment 2/2
4491	17076	29526	1.14	0.0E+00	AB037781.1	NT	Homo sapiens mRNA for KIAA1360 protein, partial cds
4528	17110	29554	1.43	0.0E+00	7019456	NT	Homo sapiens myosin regulatory light chain interacting protein (MIR), mRNA
4537	17121		7.31	0.0E+00	AF195953.1	NT	Homo sapiens membrane-bound aminopeptidase P (XNPEP2) gene, complete cds
4545	17129	29572	1.27	0.0E+00	AJ249765.1	NT	Homo sapiens ACTN2 gene for alpha-Actinin 2, exon 10
4545	17129	29573	1.27	0.0E+00	AJ249765.1	NT	Homo sapiens ACTN2 gene for alpha-Actinin 2, exon 10
4549	17132	29579	0.58	0.0E+00	W26179.1	EST_HUMAN	24q7 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA
4549	17132	29580	0.58	0.0E+00	W26179.1	EST_HUMAN	24q7 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA
4555	17138	29585	6.07	0.0E+00	4506792	NT	Homo sapiens spinocerebellar ataxia 1 (olivopontocerebellar ataxia 1, autosomal dominant, ataxin 1) (SCA1), mRNA
4555	17138	29586	6.07	0.0E+00	4506792	NT	Homo sapiens spinocerebellar ataxia 1 (olivopontocerebellar ataxia 1, autosomal dominant, ataxin 1) (SCA1), mRNA
4567	17150		2.3	0.0E+00	AF200629.1	NT	Homo sapiens HPS1 gene, intron 5
4585	17168	29611	0.59	0.0E+00	T10233.1	EST_HUMAN	seq1329 b4HB3MA Cot8-HAP-FI Homo sapiens cDNA clone b4HB3MA-COT8-HAP-FI205 5'
4585	17168	29612	0.59	0.0E+00	T10233.1	EST_HUMAN	seq1329 b4HB3MA Cot8-HAP-FI Homo sapiens cDNA clone b4HB3MA-COT8-HAP-FI205 5'
4588	17171		0.65	0.0E+00	M14123.1	NT	Human endogenous retrovirus HERV-K10

Table 4

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Probe Seq ID NO.	Exon Seq ID NO.	ORF Seq ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4589	17172	29616	1.48	0.0E+00	AA228126.1	EST_HUMAN	z55c04.t1 Soares_NhMFPu_S1 Homo sapiens cDNA clone IMAGE:667590 5' similar to TR:G222811
4589	17172	29617	1.48	0.0E+00	AA228126.1	EST_HUMAN	G222811 ALPHA 1 CHAIN OF TYPE XII COLLAGEN. ;
4599	17183	29630	6.46	0.0E+00	AW084964.1	EST_HUMAN	z55c04.t1 Soares_NhMFPu_S1 Homo sapiens cDNA clone IMAGE:667590 5' similar to TR:G222811
4601	18007		2.1	0.0E+00	8051619	NT	G222811 ALPHA 1 CHAIN OF TYPE XII COLLAGEN. ;
4603	17188	29633	0.92	0.0E+00	AI696898.1	EST_HUMAN	xc68c08.x1 NCI_CGAP_Eso2 Homo sapiens cDNA clone IMAGE:2589446 3' similar to SW:AHNK_HUMAN
4607	17190		8.58	0.0E+00	AL163207.2	NT	Q09666 NEUROBLAST DIFFERENTIATION ASSOCIATED PROTEIN AHNAK. ;
4609	17192	29638	2.41	0.0E+00	AW381570.1	EST_HUMAN	Homo sapiens LIM domain kinase 2 (LMK2), transcript variant 2a, mRNA
4615	17198	29645	1.43	0.0E+00	AJ278120.1	NT	wc56b02.x1 NCI_CGAP_P128 Homo sapiens cDNA clone IMAGE:2322603 3' similar to contains MER22.b2
4615	17198	29646	1.43	0.0E+00	AJ278120.1	NT	PTR5 repetitive element. ;
4617	17200	29648	2.01	0.0E+00	4758467	NT	Homo sapiens chromosome 21 segment HS21C007
4618	17201	29649	3.29	0.0E+00	AF108830.1	NT	PMT-H70305-101199-002-d03 HT0305 Homo sapiens cDNA
4623	17206	29655	1.19	0.0E+00	4506952	NT	Homo sapiens mRNA for putative ankyrin-repeat containing protein (ORF1)
4628	17211	29661	1.16	0.0E+00	AF111163.1	NT	Homo sapiens G protein-coupled receptor 50 (GPR50) mRNA
4628	17211	29662	1.16	0.0E+00	AF111163.1	NT	Homo sapiens serine-threonine protein kinase (MINBH) mRNA, complete cds
4637	18008	29673	2.92	0.0E+00	6005973	NT	Homo sapiens sialyltransferase 8 (alpha-N-acetylneuraminase, alpha-2,8-sialyltransferase, GD3 synthase) (SIAT8) mRNA
4642	17224	29678	4.04	0.0E+00	AF208161.1	NT	Homo sapiens pyrin (MEFV) gene, complete cds
4647	17229	29685	1.66	0.0E+00	AF152337.1	NT	Homo sapiens pyrin (MEFV) gene, complete cds
4650	17232	29689	1.5	0.0E+00	5454175	NT	Homo sapiens zinc finger protein 195 (ZNF195), mRNA
4662	17244	29698	32.6	0.0E+00	4503470	NT	Homo sapiens syncytin precursor, mRNA, complete cds
4671	17253	29705	0.79	0.0E+00	4505016	NT	Homo sapiens probocadherin gamma C3 (PCDH-gamma-C3) mRNA, complete cds
4675	17257	29708	1.02	0.0E+00	4503098	NT	Homo sapiens zinc finger protein 211 (ZNF211), mRNA
4679	17261	29713	1.14	0.0E+00	4502556	NT	Homo sapiens eukaryotic translation elongation factor 1 alpha 1 (EEF1A1) mRNA
4684	17266		3.03	0.0E+00	L35485.1	NT	Homo sapiens low density lipoprotein receptor-related protein 6 (LRP6) mRNA, and translated products
4686	17268	29716	9.75	0.0E+00	7662091	NT	Homo sapiens chondroitin sulfate proteoglycan 4 (melanoma-associated) (CSPG4), mRNA
4686	17268	29717	9.75	0.0E+00	7662091	NT	Homo sapiens calcium/calmodulin-dependent protein kinase IV (CAMK4) mRNA
4707	17289	29733	3.17	0.0E+00	AF143314.1	NT	Homo sapiens iduronate sulphate sulphatase (IDS) gene, complete cds
4710	17292	29736	11.37	0.0E+00	AJ245418.1	NT	Homo sapiens KIAA0390 gene product (KIAA0390), mRNA
							Homo sapiens KIAA0390 gene product (KIAA0390), mRNA
							Homo sapiens PTEN (PTEN) gene, exons 3 through 5
							Homo sapiens mRNA for G7c protein (G7c gene located in the class II region of the major histocompatibility complex)

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4710	17282	29737	11.37	0.0E+00	AJ245418.1	NT	Homo sapiens mRNA for G7c protein (G7c gene located in the class III region of the major histocompatibility complex)
4712	17284	29738	0.64	0.0E+00	AB018338.1	NT	Homo sapiens mRNA for KIAA0785 protein, partial cds
4718	17289		0.65	0.0E+00	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
4730	17311		1.68	0.0E+00	AA174072.1	EST_HUMAN	z91808.s1 Stralagene fetal retina 937202 Homo sapiens cDNA clone IMAGE:609854 3'
4732	17313		1.97	0.0E+00	7657410	NT	Homo sapiens odz (odd Oz/ten-m, Drosophila) homolog 1 (ODZ1), mRNA
4734	17315		2.45	0.0E+00	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
4735	17316	29758	1.69	0.0E+00	AF184110.1	NT	Homo sapiens cyclophilin-related protein (NKTR) gene, complete cds
4736	17317	29759	5.45	0.0E+00	AL163300.2	NT	Homo sapiens chromosome 21 segment HS21C100
4737	17318		1.94	0.0E+00	AB037521.1	NT	Homo sapiens gene for natifuric protein, partial cds
4739	17320	29760	0.62	0.0E+00	AF195658.1	NT	Homo sapiens DNA mismatch repair protein (MLH3) gene, complete cds
4747	17328	29770	8.77	0.0E+00	4557887	NT	Homo sapiens keratin 18 (KRT18) mRNA
4747	17328	29771	8.77	0.0E+00	4557887	NT	Homo sapiens keratin 18 (KRT18) mRNA
4748	17329	29772	1.57	0.0E+00	AF167441.1	NT	Mus musculus E-cadherin binding protein E7 mRNA, complete cds
4757	17338	29783	1.13	0.0E+00	AB028970.1	NT	Homo sapiens mRNA for KIAA1047 protein, partial cds
4757	17338	29784	1.13	0.0E+00	AB028970.1	NT	Homo sapiens mRNA for KIAA1047 protein, partial cds
4763	17344	29792	12.17	0.0E+00	Y18890.1	NT	Human endogenous retrovirus type K (HERV-K), gag, pol and env genes
4772	17353	29805	1.21	0.0E+00	BE081527.1	EST_HUMAN	QV2-BT0635-160400-142-h05 BT0635 Homo sapiens cDNA
4773	17354	29806	1.04	0.0E+00	AA118246.1	EST_HUMAN	z96607.s1 Soares_NHMPu_S1 Homo sapiens cDNA clone IMAGE:767605 3'
4779	17360		2.04	0.0E+00	AF086641.1	NT	Homo sapiens truncated tenascin XB (TNXB) gene, partial cds and TNXA gene recombination breakpoint region
4785	17365	29816	1.09	0.0E+00	AL163278.2	NT	Homo sapiens chromosome 21 segment HS21C078
4785	17365	29817	1.09	0.0E+00	AL163278.2	NT	Homo sapiens chromosome 21 segment HS21C078
4786	17366	29818	2.54	0.0E+00	AB037820.1	NT	Homo sapiens mRNA for KIAA1389 protein, partial cds
4786	17366	29819	2.54	0.0E+00	AB037820.1	NT	Homo sapiens mRNA for KIAA1389 protein, partial cds
4787	17367	29820	2.04	0.0E+00	M74098.1	NT	Human displacement protein (CCAAT) mRNA
4792	17371	29824	2	0.0E+00	6453812	NT	Homo sapiens butyrophilin, subfamily 2, member A2 (BTN2A2), mRNA
4792	17371	29825	2	0.0E+00	6453812	NT	Homo sapiens butyrophilin, subfamily 2, member A2 (BTN2A2), mRNA
4794	12809	25297	1.8	0.0E+00	T56945.1	EST_HUMAN	y83g04.r2 Stralagene fetal spleen (#637205) Homo sapiens cDNA clone IMAGE:68310 5'
4794	12809	25298	1.8	0.0E+00	T56945.1	EST_HUMAN	y83g04.r2 Stralagene fetal spleen (#637205) Homo sapiens cDNA clone IMAGE:68310 5'
4797	17375		1.1	0.0E+00	BE278730.1	EST_HUMAN	601158833F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3505521 5'
4803	17381	29831	0.64	0.0E+00	BE980050.1	EST_HUMAN	601285246F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3607087 5'
4818	17396	29849	0.93	0.0E+00	5729817	NT	Homo sapiens ecotropic viral integration site 2B (EVI2B), mRNA
4818	17396	29850	0.93	0.0E+00	5729817	NT	Homo sapiens ecotropic viral integration site 2B (EVI2B), mRNA

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Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4819	17397	29851	1.01	0.0E+00	U56651.1	NT	Mus musculus neurophilin 1 (Nxp1) gene, large exon and 3' end of the intron, and partial cds
4823	17401	29854	5.32	0.0E+00	M80902.1	NT	Human AHNAC nucleoprotein mRNA, 5' end
4826	17404	29857	133.49	0.0E+00	M69197.1	NT	Human haptoglobin and haptoglobin-related protein (HP and HPR) genes, complete cds
4828	17404	29858	133.49	0.0E+00	M69197.1	NT	Human haptoglobin and haptoglobin-related protein (HP and HPR) genes, complete cds
4829	17407	29861	1.32	0.0E+00	AF184110.1	NT	Homo sapiens cyclophilin-related protein (NKTR) gene, complete cds
4832	17410	29863	1.26	0.0E+00	7662181	NT	Homo sapiens KIAA0563 gene product (KIAA0563), mRNA
4851	17429		1.08	0.0E+00	X58487.1	NT	Human CYP2D7AP pseudogene for cytochrome P450 2D6
4861	17439	29888	0.83	0.0E+00	7304922	NT	Homo sapiens bromodomain adjacent to zinc finger domain, 2B (BAZ2B), mRNA
4861	17439	29889	0.83	0.0E+00	7304922	NT	Homo sapiens bromodomain adjacent to zinc finger domain, 2B (BAZ2B), mRNA
4873	17448	29899	1.3	0.0E+00	AF026801.1	NT	Homo sapiens alpha-3 type IX collagen (COL9A3) gene, promoter region, and exons 1-26
4876	17451	29902	0.91	0.0E+00	6677700	NT	Homo sapiens G-protein coupled receptor (RE2), mRNA
4876	17451	29903	0.91	0.0E+00	6677700	NT	Homo sapiens G-protein coupled receptor (RE2), mRNA
4878	17454	29906	0.83	0.0E+00	7019320	NT	Homo sapiens proteinx0008 (AD013), mRNA
4879	17454	29907	0.83	0.0E+00	7019320	NT	Homo sapiens proteinx0008 (AD013), mRNA
4900	17475	29931	1.61	0.0E+00	AW444637.1	EST_HUMAN	UIH-B19-ajw-c-04-Q-UJ.s1 NCL CGAP_Sub5 Homo sapiens cDNA clone IMAGE:2733294 3'
4907	17482	29940	1.36	0.0E+00	AF303134.1	NT	Homo sapiens aldehyde dehydrogenase 12 (ALDH12) mRNA, complete cds
4910	17485		1.51	0.0E+00	AF083242.1	NT	Homo sapiens HSPC024-iso mRNA, complete cds
4923	17498		0.59	0.0E+00	AW339253.1	EST_HUMAN	x289d08.x1 NCL CGAP_Lu24 Homo sapiens cDNA clone IMAGE:2871371 3'
4988	17542		3.61	0.0E+00	AF240786.1	NT	Homo sapiens glutathione S-transferase theta 1 (GSTT1) genes, complete cds
4971	17545	29987	1.76	0.0E+00	X87205.1	NT	M fascicularis mRNA for metalloproteinase-like, disintegrin-like protein, IVa
4973	17547	29989	1.19	0.0E+00	AF084479.1	NT	Homo sapiens Williams-Beuren syndrome deletion transcript 9 (WBSR9) mRNA, complete cds
4974	17548	29990	1.36	0.0E+00	AF097416.1	NT	Mus musculus zinc finger transcription factor Kaiso mRNA, complete cds
4975	17549	29991	4.69	0.0E+00	4503766	NT	Homo sapiens fragile X mental retardation 2 (FMR2) mRNA
4977	17551	29993	12.25	0.0E+00	4885048	NT	Homo sapiens actin, alpha, cardiac muscle (ACTC), mRNA
4978	17552	29994	1.19	0.0E+00	P52740	SWISSPROT	ZINC FINGER PROTEIN 132
4980	17554	29996	1.7	0.0E+00	8922180	NT	Homo sapiens hypothetical protein DKFZp762E1312 (DKFZp762E1312), mRNA
4983	17557	30000	5.09	0.0E+00	8923080	NT	Homo sapiens hypothetical protein FLJ20073 (FLJ20073), mRNA
4987	17561	30004	1.8	0.0E+00	M94081.1	NT	Human Tcr-C-delta gene, exons 1-4; Tcr-V-delta gene, exons 1-2; T-cell receptor alpha (Tcr-alpha) gene, J1-J61 segments; and Tcr-C-alpha gene, exons 1-4
4987	17561	30005	1.8	0.0E+00	M94081.1	NT	Human Tcr-C-delta gene, exons 1-4; Tcr-V-delta gene, exons 1-2; T-cell receptor alpha (Tcr-alpha) gene, J1-J61 segments; and Tcr-C-alpha gene, exons 1-4
4989	17563	30007	1.78	0.0E+00	X94628.1	NT	H. sapiens MeCP-2 gene
4989	17563	30008	1.78	0.0E+00	X94628.1	NT	H. sapiens MeCP-2 gene

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4892	17566	30011	2.79	0.0E+00	AL163280.2	NT	Homo sapiens chromosome 21 segment HS21C080
4994	17568	30012	0.98	0.0E+00	7708604	NT	Homo sapiens MAGE-C2 (MAGEC2), mRNA
5005	17578	30022	0.95	0.0E+00	5032150	NT	Homo sapiens TATA box binding protein (TBP)-associated factor, RNA polymerase II, 28kD (TAF2)
5015	17589	30032	1.75	0.0E+00	4585642	NT	mRNA
5016	17590	30033	0.84	0.0E+00	AB037894.1	NT	Homo sapiens zinc finger protein (KIAA0412) mRNA
5017	17591	30034	1.32	0.0E+00	AB014533.1	NT	Homo sapiens mRNA for KIAA1443 protein, partial cds
5018	17592	30035	2.53	0.0E+00	6677948	NT	Homo sapiens mRNA for KIAA0633 protein, partial cds
5019	17593	30036	2.01	0.0E+00	5174560	NT	Mus musculus zinc finger protein interacting with K protein 1 (Zik1), mRNA
5021	17595	30038	2.81	0.0E+00	4758199	NT	Homo sapiens meningoangioma expressed antigen 6 (colled-coil proline-rich) (MGEA6), mRNA
5023	17597	30040	0.98	0.0E+00	Y16723.1	NT	Homo sapiens desmoplakin (DPI, DPII) (DSP) mRNA
5024	17598	30041	1.26	0.0E+00	5174560	NT	Homo sapiens gene encoding filensin, exon 8
5024	17598	30042	1.26	0.0E+00	5174560	NT	Homo sapiens meningoangioma expressed antigen 6 (colled-coil proline-rich) (MGEA6), mRNA
5026	17600	30045	16.3	0.0E+00	AF055086.1	NT	Homo sapiens meningoangioma expressed antigen 6 (colled-coil proline-rich) (MGEA6), mRNA
5028	17602	30046	2.87	0.0E+00	4505308	NT	Homo sapiens MHC class 1 region
5029	17603	30048	3.33	0.0E+00	AF081711.1	NT	Homo sapiens opiod receptor, delta 1 (OPRD1) mRNA
5041	17614	30058	2.27	0.0E+00	4503684	NT	Homo sapiens splice variant AKAP350 mRNA, partial cds
5043	17616	30060	3.9	0.0E+00	4557472	NT	Homo sapiens farnesyl diphosphate synthase (farnesyl pyrophosphate synthetase, dimethylallyltransferase, geranyltransferase) (FDPS) mRNA
5043	17616	30061	3.9	0.0E+00	4557472	NT	Homo sapiens chloride channel 5 (nephrolithiasis 2, X-linked, Dent disease) (CLCN5) mRNA
5058	17631		0.59	0.0E+00	AI291129.1	EST_HUMAN	Homo sapiens chloride channel 5 (nephrolithiasis 2, X-linked, Dent disease) (CLCN5) mRNA
5061	17634	30076	2.85	0.0E+00	AB006625.1	NT	qm1505.x1 NCL CGAP_LJ5 Homo sapiens cDNA clone IMAGE:1881921 3' similar to TR:Q81632 Q81632 EN-2/LACZ FUSION PROTEIN :
5061	17634	30077	2.85	0.0E+00	AB006625.1	NT	Homo sapiens mRNA for KIAA0287 gene, partial cds
5072	17645	30087	0.92	0.0E+00	AB028898.1	NT	Homo sapiens mRNA for KIAA0287 gene, partial cds
5088	17661	30101	1.38	0.0E+00	AL163284.2	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
5093	17666	30105	0.57	0.0E+00	7682319	NT	Homo sapiens chromosome 21 segment HS21C084
5103	17675	30115	2.12	0.0E+00	4502398	NT	Homo sapiens KIAA0806 gene product (KIAA0806), mRNA
5108	17680		7.33	0.0E+00	U14997.1	NT	Homo sapiens beaded filament structural protein 1, filensin (BFSP1) mRNA
5118	17690	30128	1.25	0.0E+00	M10976.1	NT	Human ribosomal protein L21 mRNA, complete cds
5121	17693		2.86	0.0E+00	BE409863.1	EST_HUMAN	Human endogenous retroviral DNA (4-1), complete retroviral segment
5124	17696	30133	3.82	0.0E+00	4758199	NT	801303729F1 NIH_MGC 21 Homo sapiens cDNA clone IMAGE:3638118 5'
5135	17707	30139	1.19	0.0E+00	AB028966.1	NT	Homo sapiens desmoplakin (DPI, DPII) (DSP) mRNA
						NT	Homo sapiens mRNA for KIAA1043 protein, partial cds

Table 4

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5152	17722	30152	1.89	0.0E+00	8923441	NT	Homo sapiens hypothetical protein FLJ20477 (FLJ20477), mRNA
5152	17722	30153	1.89	0.0E+00	8923441	NT	Homo sapiens hypothetical protein FLJ20477 (FLJ20477), mRNA
5170	17738	30185	1.07	0.0E+00	AA601246.1	EST_HUMAN	no14909.s1 NCL_CGAP_Phe1 Homo sapiens cDNA clone IMAGE:1100704 3' similar to TR.E239140 E239140 SPALT PROTEIN
5170	17738	30186	1.07	0.0E+00	AA601246.1	EST_HUMAN	no14909.s1 NCL_CGAP_Phe1 Homo sapiens cDNA clone IMAGE:1100704 3' similar to TR.E239140 E239140 SPALT PROTEIN
5170	17738	30187	1.07	0.0E+00	AA601246.1	EST_HUMAN	no14909.s1 NCL_CGAP_Phe1 Homo sapiens cDNA clone IMAGE:1100704 3' similar to TR.E239140 E239140 SPALT PROTEIN
5172	17739	30188	0.96	0.0E+00	AF161463.1	NT	Homo sapiens HSPC114 mRNA, complete cds
5172	17739	30189	0.96	0.0E+00	AF161463.1	NT	Homo sapiens HSPC114 mRNA, complete cds
5183	12887	25374	0.58	0.0E+00	AF195958.1	NT	Homo sapiens DNA mismatch repair protein (MLH3) gene, complete cds
5188	17753		1.72	0.0E+00	4758225	NT	Homo sapiens E2F transcription factor 2 (E2F2) mRNA
5199	17764	30189	0.94	0.0E+00	AF016705.1	NT	Homo sapiens E8-AP ubiquitin-protein ligase (UBE3A) gene, exon 3
5204	17768	30192	0.67	0.0E+00	U53588.1	NT	Homo sapiens MHC class 1 region
5211	17776		1.3	0.0E+00	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
5214	17779		29.82	0.0E+00	D50657.1	NT	Homo sapiens gamma-cytoplasmic actin (ACTGP3) pseudogene
5245	17809	30231	3.36	0.0E+00	X52888.1	NT	Bacillus amyloqueliciens sacB gene for levansucrase (EC 2.4.1.10)
5266	17828	30252	1.23	0.0E+00	AF240635.1	NT	Homo sapiens vascular endothelial cadherin 2 mRNA, complete cds
5266	17828	30253	1.23	0.0E+00	AF240635.1	NT	Homo sapiens vascular endothelial cadherin 2 mRNA, complete cds
5287	17828	30254	0.96	0.0E+00	5454153	NT	Homo sapiens cyclophilin (USA-CYP) mRNA
5282	17844	30271	0.95	0.0E+00	6677700	NT	Homo sapiens G-protein coupled receptor (RE2), mRNA
5298	17860	30285	0.77	0.0E+00	5902055	NT	Homo sapiens ring finger protein (RNF), mRNA
5300	17862	30286	1.03	0.0E+00	M10905.1	NT	Human cellular fibronectin mRNA
5300	17862	30287	1.03	0.0E+00	M10905.1	NT	Human cellular fibronectin mRNA
5301	17863	30288	0.93	0.0E+00	U91328.1	NT	Human hereditary haemochromatosis region, histone 2A-like protein gene, hereditary haemochromatosis (HLA-H) gene, RoRet gene, and sodium phosphate transporter (NPT3) gene, complete cds
5308	17870	30292	0.84	0.0E+00	Y08032.1	NT	Human endogenous retrovirus-K, LTR U5 and gag gene
5326	17888	30304	0.67	0.0E+00	5902091	NT	Homo sapiens solute carrier family 5 (inositol transporters), member 3 (SLC5A3), mRNA
5333	17894	30308	1.1	0.0E+00	L35475.1	NT	Human olfactory receptor-like gene, complete cds
5333	17894	30309	1.1	0.0E+00	L35475.1	NT	Human olfactory receptor-like gene, complete cds
5340	17901	30316	0.81	0.0E+00	7706245	NT	Homo sapiens 4F2 light chain (LOC51597), mRNA
5340	17901	30317	0.81	0.0E+00	7706245	NT	Homo sapiens 4F2 light chain (LOC51597), mRNA
5341	17902	30318	0.8	0.0E+00	7662421	NT	Homo sapiens KIAA0971 protein (KIAA0971), mRNA

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5347	17807	30322	25.99	0.0E+00	J02810.1	NT	Human apolipoprotein B-100 mRNA, complete cds
5355	17815	30330	0.98	0.0E+00	U71601.1	NT	Human zinc finger protein zfp47 (zf47) mRNA, partial cds
5357	17817	30332	1.08	0.0E+00	P51523	SWISSPROT	ZINC FINGER PROTEIN 84 (ZINC FINGER PROTEIN HPF2)
5365	17825	30339	9.37	0.0E+00	M19828.1	NT	Human apolipoprotein B-100 (apoB) gene, exons 22 through 29
5373	17832	30346	11.28	0.0E+00	5360213	NT	Human sapiens glypican 3 (GPC3) mRNA
5374	17833	30347	1.1	0.0E+00	4826777	NT	Human sapiens jumonji (mouse) homolog (JMJ) mRNA
5377	17836	30349	0.68	0.0E+00	AE000327.1	NT	Escherichia coli K-12 MG1655 section 217 of 400 of the complete genome
5385	17844	30357	8.06	0.0E+00	4885474	NT	Human sapiens apolipoprotein B (including Ag(x) antigen) (APOB) mRNA
5389	17857	30368	1.01	0.0E+00	4502152	NT	Human sapiens melanoma antigen, family C, 1 (MAGEC1), mRNA
5430	17887	30391	1.58	0.0E+00	4826977	NT	Human sapiens reelin (RELN) mRNA
5451	18020		3.55	0.0E+00	AF093093.1	NT	Human sapiens acolinase (ACO2) gene, nuclear gene encoding mitochondrial protein, exon 15
5459	18094	30411	2.26	0.0E+00	AF137286.1	NT	Human sapiens keratin 12 (KRT12) gene, complete cds
5459	18094	30412	2.26	0.0E+00	AF137286.1	NT	Human sapiens keratin 12 (KRT12) gene, complete cds
5478	18112	30521	1.27	0.0E+00	A034954.1	EST_HUMAN	wp08g08.x1 NCI_CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2464094 3'
5481	18115	30524	2.18	0.0E+00	9256579	NT	Homo sapiens protocadherin alpha 13 (PCDH13), mRNA
5495	18128	30537	3.75	0.0E+00	BE931080.1	EST_HUMAN	RC3-GN0078-310800-013-b03 GN0078 Homo sapiens cDNA
5499	18133	30541	3.31	0.0E+00	AF182034.1	NT	Homo sapiens polycystic kidney disease-like 2 protein (PKDL2) mRNA, complete cds
5499	18133	30542	3.31	0.0E+00	AF182034.1	NT	Homo sapiens polycystic kidney disease-like 2 protein (PKDL2) mRNA, complete cds
5508	18139	30550	2.06	0.0E+00	X56163.1	NT	H. sapiens immunoglobulin heavy chain gene, variable region
5508	18139	30551	2.08	0.0E+00	X56163.1	NT	H. sapiens immunoglobulin heavy chain gene, variable region
5584	18215	30664	5.94	0.0E+00	BE979488.1	EST_HUMAN	7110c06.x1 NCI_CGAP_CL11 Homo sapiens cDNA clone IMAGE:3294250 3'
5585	18216	30665					h99a02.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3165194 3' similar to SW:Y054_HUMAN
5588	18217	30668	1.67	0.0E+00	BE220753.1	EST_HUMAN	P42694 HYPOTHETICAL PROTEIN KIAA0054. ;
5588	18217	30667	1.58	0.0E+00	BE784412.1	EST_HUMAN	601589422F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3943804 5'
5589	18220	30670	7.35	0.0E+00	M29608.1	NT	601589422F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3943804 5'
5600	24746	30678	4.43	0.0E+00	11421038	NT	Homo sapiens eosinophil peroxidase (EPP) gene, exon 7
5609	18238		1.68	0.0E+00	BF665962.1	EST_HUMAN	Homo sapiens Sp4 transcription factor (SP4), mRNA
5614	18243	30694	0.8	0.0E+00	BE538857.1	EST_HUMAN	60211828F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4276254 5'
5622	18251	30719	1.49	0.0E+00	BE282784.1	EST_HUMAN	601061489F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3447839 5'
5628	18255	30724	2.5	0.0E+00	BF526328.1	EST_HUMAN	60105891F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2888310 5'
5628	18255	30725	2.5	0.0E+00	BF526328.1	EST_HUMAN	602071372F1 NCI_CGAP_Bm64 Homo sapiens cDNA clone IMAGE:4214272 5'
5645	18508	32325	2.91	0.0E+00	4557364	NT	602071372F1 NCI_CGAP_Bm64 Homo sapiens cDNA clone IMAGE:4214272 5'
5648	18278	30751	0.9	0.0E+00	AB007635.1	NT	Homo sapiens Bloom syndrome (BLM) mRNA
							Homo sapiens mRNA for KIAA0466 protein, partial cds

Table 4

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptbr
5648	18276	30752	0.9	0.0E+00	AB007935.1	NT	Homo sapiens mRNA for KIAA0468 protein, partial cds
5652	18278	30756	4.93	0.0E+00	AF257737.1	NT	Homo sapiens ciliary dynein heavy chain 9 (DNAH9) mRNA, complete cds
5652	18278	30757	4.93	0.0E+00	AF257737.1	NT	Homo sapiens ciliary dynein heavy chain 9 (DNAH9) mRNA, complete cds
5665	18292	30771	1.42	0.0E+00	D28535.1	NT	Human gene for dihydropyrimidine succinyltransferase, complete cds (exon 1-15)
5665	18292	30772	1.42	0.0E+00	D28535.1	NT	Human gene for dihydropyrimidine succinyltransferase, complete cds (exon 1-15)
5680	18307	30803	1.98	0.0E+00	11420819	NT	Homo sapiens olfactory receptor, family 2, subfamily F, member 1 (OR2F1), mRNA
5686	18312	30809	0.86	0.0E+00	Z38133.1	NT	H. sapiens mRNA for myosin
5704	18330	30833	0.89	0.0E+00	D61584.1	EST_HUMAN	HUM418D05B Clontech human fetal brain polyA+ mRNA (#6535) Homo sapiens cDNA clone GEN-418D05
5704	18330	30834	0.89	0.0E+00	D61584.1	EST_HUMAN	HUM418D05B Clontech human fetal brain polyA+ mRNA (#6535) Homo sapiens cDNA clone GEN-418D05
5707	18333	30838	5.12	0.0E+00	BF528931.1	EST_HUMAN	602042322F1 NCI CGAP Bm67 Homo sapiens cDNA clone IMAGE:4179988 5'
5707	18333	30839	5.12	0.0E+00	BF528931.1	EST_HUMAN	602042322F1 NCI CGAP Bm67 Homo sapiens cDNA clone IMAGE:4179988 5'
5712	18338	30843	2.7	0.0E+00	BF313139.1	EST_HUMAN	601897658F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4128815 5'
5723	18349	31052	4.03	0.0E+00	11434392	NT	Homo sapiens calcium channel, voltage-dependent, alpha 1G subunit (CACNA1G), mRNA
5753	18378	31090	1.49	0.0E+00	BE260777.1	EST_HUMAN	601150252F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3502809 5'
5762	18388		4.96	0.0E+00	AW867316.1	EST_HUMAN	MIR0-SN0037-030400-001-R07 SN0037 Homo sapiens cDNA
5775	18400	31114	2.42	0.0E+00	BE292889.1	EST_HUMAN	601105291F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2987803 5'
5775	18400	31115	2.42	0.0E+00	BE292889.1	EST_HUMAN	601105291F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2987803 5'
5793	18418	31133	1.87	0.0E+00	11420819	NT	Homo sapiens olfactory receptor, family 2, subfamily F, member 1 (OR2F1), mRNA
5793	18418	31134	1.87	0.0E+00	11420819	NT	Homo sapiens olfactory receptor, family 2, subfamily F, member 1 (OR2F1), mRNA
5800	18425	31142	4.39	0.0E+00	AF064254.1	NT	Homo sapiens very long-chain acyl-CoA synthetase homolog 1 mRNA, complete cds
5800	18425	31143	4.39	0.0E+00	AF064254.1	NT	Homo sapiens very long-chain acyl-CoA synthetase homolog 1 mRNA, complete cds
5806	18431	31151	2.56	0.0E+00	AJ224639.1	NT	Homo sapiens Surf-5 and Surf-6 genes
5806	18431	31152	2.56	0.0E+00	AJ224639.1	NT	Homo sapiens Surf-5 and Surf-6 genes
5833	18457	31178	0.72	0.0E+00	AJ188515.1	EST_HUMAN	q94g10.x1 Soares placenta, 8to9weeks_2NBHP806W Homo sapiens cDNA clone IMAGE:1757730 3'
5837	18481	31184	6.38	0.0E+00	M85719.1	EST_HUMAN	similar to SW: CADC_HUMAN P55289 BRAIN-CADHERIN PRECURSOR ;
5844	18488	31193	6.20	0.0E+00	AW405472.1	EST_HUMAN	EST02238 Fetal brain, Stralagene (cat#936206) Homo sapiens cDNA clone HFCM48
5856	18479	31202	1.35	0.0E+00	Z28269.1	NT	U1-HF-BLO-adh-d-02-0-J1.1 NIH_MGC_37 Homo sapiens cDNA clone IMAGE:3061658 5'
5866	18488	31212	1.78	0.0E+00	AW361877.1	EST_HUMAN	H. sapiens isoform 1 gene for L-type calcium channel, exon 14 adnd 15
5866	18488	31213	1.78	0.0E+00	AW361877.1	EST_HUMAN	PM3-CT0263-091299-007-h05 CT0263 Homo sapiens cDNA
5866	18488	31214	1.78	0.0E+00	AW361877.1	EST_HUMAN	PM3-CT0263-091299-007-h05 CT0263 Homo sapiens cDNA
5870	18492	31219	1.91	0.0E+00	U38261.1	NT	Human beta-prime-adaptin (BAM22) gene, exon 13

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5997	18519	31244	1.02	0.0E+00	AB046861.1	NT	Homo sapiens mRNA for KIAA1641 protein, partial cds
5951	18573	31305	1.46	0.0E+00	AJ06345.1	NT	Homo sapiens KVLQT1 gene
5951	18573	31306	1.46	0.0E+00	AJ06345.1	NT	Homo sapiens KVLQT1 gene
5958	18580	31315	1.29	0.0E+00	AJ07616.1	EST_HUMAN	HA2981 Human fetal liver cDNA library Homo sapiens cDNA
5975	18595	31330	4.89	0.0E+00	11416801	NT	Homo sapiens protocadherin beta 2 (PCDH2), mRNA
5980	18600	31333	1.09	0.0E+00	BE781173.1	EST_HUMAN	601584032F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3838551 5'
5987	18607	31341	1.29	0.0E+00	9908943	NT	Homo sapiens amiloride-sensitive cation channel 1, neuronal (degenerin) (ACCN1), mRNA
5988	18608	31342	6.36	0.0E+00	BE560082.1	EST_HUMAN	60134514F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3677843 5'
5989	18609	31343	1.48	0.0E+00	10048478	NT	Mus musculus ezonin (Acz), mRNA
5990	18610	31344	3.25	0.0E+00	U86981.1	NT	Human L-type calcium channel beta-1 subunit (CACNLB1) gene, exon 13B and isoform beta-1B, complete cds
5990	18610	31345	3.25	0.0E+00	U86981.1	NT	Human L-type calcium channel beta-1 subunit (CACNLB1) gene, exon 13B and isoform beta-1B, complete cds
6008	18628	31363	2.23	0.0E+00	BF33835.1	EST_HUMAN	602036272F1 NCI_CGAP_Bim64 Homo sapiens cDNA clone IMAGE:4184321 5'
6010	18630	31365	0.88	0.0E+00	AF142621.1	NT	Homo sapiens calcium channel gamma 5 subunit (CACNG5) gene, exon 4 and complete cds
6011	18631	31366	3.17	0.0E+00	BE273983.1	EST_HUMAN	601104462F1 NIH_MGC_14 Homo sapiens cDNA clone IMAGE:3347463 5'
6020	18639	31379	1.22	0.0E+00	BE503096.1	EST_HUMAN	hz83d11.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3214591 3' similar to TR:Q62084 Q62084
6024	18643	31385	2.27	0.0E+00	BF569605.1	EST_HUMAN	PHOSPHOLIPASE C NEIGHBORING ;
6028	18647	31388	1.14	0.0E+00	AA454642.1	EST_HUMAN	602185852F1 NIH_MGC_45 Homo sapiens cDNA clone IMAGE:4310076 5'
6060	18677	31419	3.11	0.0E+00	AF217289.1	NT	z09d06.s1 Soares_NHMPu_ST Homo sapiens cDNA clone IMAGE:811883 3'
6062	18679	31421	2.35	0.0E+00	BE828144.1	EST_HUMAN	Homo sapiens cadherin 20 (CDH20) mRNA, complete cds
6066	18683	31425	1.25	0.0E+00	BE958636.1	EST_HUMAN	RC5-E10027-210600-022-G10 ET0027 Homo sapiens cDNA
6083	18700	31447	0.9	0.0E+00	AW276760.1	EST_HUMAN	601184528F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:3930453 5'
6093	18709	31457	0.96	0.0E+00	BF031742.1	EST_HUMAN	xp6503.x1 NCI_CGAP_Ov39 Homo sapiens cDNA clone IMAGE:2745245 3' similar to TR:P78335 P78335
6093	18709	31458	0.96	0.0E+00	BF031742.1	EST_HUMAN	GUANYLATE KINASE ASSOCIATED PROTEIN ;
6104	18720	31473	1.03	0.0E+00	AW470846.1	EST_HUMAN	601558060F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:3827775 5'
6115	18731	31483	1.1	0.0E+00	BF155670.1	EST_HUMAN	601558060F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:3827775 5'
6115	18731	31484	1.1	0.0E+00	BF155670.1	EST_HUMAN	ha34d06.x1 NCI_CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2875595 3' similar to TR:Q821N3
6123	18738	31480	1.38	0.0E+00	W33069.1	EST_HUMAN	Q921N3 MYOSIN-RHOGAP PROTEIN, MYR 7 ;
6123	18738	31481	1.38	0.0E+00	W33069.1	EST_HUMAN	QV4-HT0894-290900-399-a10 HT0894 Homo sapiens cDNA
6124	18739		2.2	0.0E+00	AF012618.1	NT	QV4-HT0894-290900-399-a10 HT0894 Homo sapiens cDNA
							z08h06.r1 Soares_parathyroid_tumor_NbHPA Homo sapiens cDNA clone IMAGE:321755 5'
							z08h06.r1 Soares_parathyroid_tumor_NbHPA Homo sapiens cDNA clone IMAGE:321755 5'
							Homo sapiens familial mental retardation protein 2 (FMR2) gene, exon 14

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6127	18742	31495	3.14	0.0E+00	BE280197.1	EST_HUMAN	601158515F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3505323 5'
6133	18747	31503	1.88	0.0E+00	BE889610.1	EST_HUMAN	601512630F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3914238 5'
6148	18761	31520	1.46	0.0E+00	11433071	NT	Homo sapiens KIAA0735 gene product, synaptic vesicle protein 2B homolog (KIAA0735), mRNA
6148	18761	31521	1.46	0.0E+00	11433071	NT	Homo sapiens KIAA0735 gene product, synaptic vesicle protein 2B homolog (KIAA0735), mRNA
6149	18762	31522	1.15	0.0E+00	BE901608.1	EST_HUMAN	601677735F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3980200 5'
6149	18762	31523	1.15	0.0E+00	BE901608.1	EST_HUMAN	601677735F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3980200 5'
6149	18762	31524	1.15	0.0E+00	BE901608.1	EST_HUMAN	601677735F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3980200 5'
6164	24758	31540	10.16	0.0E+00	9789986	NT	Homo sapiens potassium voltage-gated channel, Shal-related subfamily, member 2 (KCND2), mRNA
6167	18778	31543	1.38	0.0E+00	AA183506.1	EST_HUMAN	z40h01.r1 Soares_NhhMPu_S1 Homo sapiens cDNA clone IMAGE:665905 5' similar to SW:YY05_HUMAN P42894 HYPOTHETICAL MYELOID CELL LINE PROTEIN 5;
6167	18779	31544	1.38	0.0E+00	AA183506.1	EST_HUMAN	z40h01.r1 Soares_NhhMPu_S1 Homo sapiens cDNA clone IMAGE:665905 5' similar to SW:YY05_HUMAN P42894 HYPOTHETICAL MYELOID CELL LINE PROTEIN 5;
6189	18789	31568	12.83	0.0E+00	U34625.1	NT	Human T cell surface glycoprotein CD-8 mRNA, complete cds
6189	18789	31569	12.83	0.0E+00	U34625.1	NT	Human T cell surface glycoprotein CD-8 mRNA, complete cds
6229	18838	31611	1.35	0.0E+00	BE258330.1	EST_HUMAN	601114823F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3355565 5'
6238	18847	31618	1.64	0.0E+00	BE156561.1	EST_HUMAN	QV0-HT0368-090200-099-e08 HT0368 Homo sapiens cDNA
6280	18888	31657	1.54	0.0E+00	BE379007.1	EST_HUMAN	601236278F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3608490 5'
6286	18894	31663	1.23	0.0E+00	AU137772.1	EST_HUMAN	AU137772 PLACE1 Homo sapiens cDNA clone PLACE1007201 5'
6306	18913	31687	3.42	0.0E+00	U45882.1	NT	Human G protein-coupled receptor GPR-9-8 gene, complete cds
6334	18940	31717	4.13	0.0E+00	AA204740.1	EST_HUMAN	z481d03.r1 Stratagene hNT neuron (#937233) Homo sapiens cDNA clone IMAGE:848005 5' similar to TR:G854195 G854195 LEUKOCYTE SURFACE PROTEIN;
6335	18941	31718	3.66	0.0E+00	11545913	NT	Homo sapiens xylotransferase II (XT2), mRNA
6335	18941	31719	3.66	0.0E+00	11545913	NT	Homo sapiens xylotransferase II (XT2), mRNA
6354	18959	31737	0.7	0.0E+00	U07223.1	NT	Human beta2-chimerin mRNA, complete cds
6371	18975	31753	1.87	0.0E+00	11426387	NT	Homo sapiens carcinoembryonic antigen-related cell adhesion molecule 8 (CEACAM8), mRNA
6375	18979	31758	3.62	0.0E+00	BE257173.1	EST_HUMAN	601109532F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3350622 5'
6388	18991		0.94	0.0E+00	A1686048.1	EST_HUMAN	189110.x1 NCL_CGAP_P128 Homo sapiens cDNA clone IMAGE:2248939 3' similar to TR:Q14839 Q14839
6392	18995	31774	1.39	0.0E+00	L35930.1	NT	Human anion exchanger (AE1) gene, exons 1-20
6401	19004	31782	1.03	0.0E+00	BE797385.1	EST_HUMAN	601587971F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3942329 5'
6401	19004	31783	1.03	0.0E+00	BE797385.1	EST_HUMAN	601587971F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3942329 5'
6411	19014	31796	0.96	0.0E+00	BF357123.1	EST_HUMAN	MRO-HT0923-220800-102-b05 HT0923 Homo sapiens cDNA
6419	19022	31806	1.53	0.0E+00	11435630	NT	Homo sapiens peptide transporter 3 (LOC51296), mRNA

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Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6428	19031	31814	0.96	0.0E+00	D55649.1	NT	Human mRNA for alpha mannosidase II isozyme, complete cds
6442	19044	31832	1.11	0.0E+00	AW178142.1	EST_HUMAN	IL3-H10062-010899-014-A04 HT0062 Homo sapiens cDNA
6462	19063	31848	0.78	0.0E+00	BE674544.1	EST_HUMAN	7e02c12.x1 NCI CGAP Lu24 Homo sapiens cDNA clone IMAGE:3281302 3' similar to SW:Y178_HUMAN
6480	19087	31853	0.96	0.0E+00	7662039	NT	Q14681 HYPOTHETICAL PROTEIN KIAA0178 ;
6480	19081		8.14	0.0E+00	AV650020.1	EST_HUMAN	Homo sapiens KIAA0285 gene product (KIAA0285), mRNA
6487	19088	31871	3.19	0.0E+00	AW575598.1	EST_HUMAN	AV650020 GLC Homo sapiens cDNA clone GLCCAD09 3'
6490	19091	31874	5.26	0.0E+00	H01255.1	EST_HUMAN	UI-HF-BL0-acc-g-12-0-J1.s1 NIH_MGC_37 Homo sapiens cDNA clone IMAGE:3058751 3'
6501	19101	31886	3.3	0.0E+00	X15377.1	NT	Y27503.r1 Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:148933 5'
6503	19103	31888	1.02	0.0E+00	A1812841.1	EST_HUMAN	Human gene for the light and heavy chains of myeloperoxidase
6509	19109	31894	4.19	0.0E+00	BE735989.1	EST_HUMAN	tz57d08.x1 NCI CGAP_Oy35 Homo sapiens cDNA clone IMAGE:2282687 3' similar to SW:NTCS_HUMAN
6509	19109	31895	4.19	0.0E+00	BE735989.1	EST_HUMAN	P83798 SODIUM- AND CHLORIDE-DEPENDENT CREATINE TRANSPORTER 2 ;
6513	19113	31901	0.83	0.0E+00	AW748598.1	EST_HUMAN	601305369F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3639616 5'
6513	19113	31902	0.83	0.0E+00	AW748598.1	EST_HUMAN	601305369F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3639616 5'
6515	19115	31904	187.18	0.0E+00	AU119245.1	EST_HUMAN	MRO-BT0264-221199-002-f11 BT0264 Homo sapiens cDNA
6515	19115	31905	187.18	0.0E+00	AU119245.1	EST_HUMAN	MRO-BT0264-221199-002-f11 BT0264 Homo sapiens cDNA
6519	19119	31910	0.83	0.0E+00	BE780453.1	EST_HUMAN	AU119245 HEMBA1 Homo sapiens cDNA clone HEMBA1005360 5'
6520	19120	31911	0.89	0.0E+00	X92217.1	NT	AU119245 HEMBA1 Homo sapiens cDNA clone HEMBA1005360 5'
6531	19131	31925	1.96	0.0E+00	A1989483.1	EST_HUMAN	AU119245 HEMBA1 Homo sapiens cDNA clone HEMBA1005360 5'
6543	19142	31934	2.84	0.0E+00	BE293150.1	EST_HUMAN	H sapiens germline immunoglobulin heavy chain, variable region, (13-2)
6543	19142	31935	2.84	0.0E+00	BE293153.1	EST_HUMAN	ws25c07.x1 NCI CGAP_G08 Homo sapiens cDNA clone IMAGE:2498220 3'
6606	19203	32009	1.05	0.0E+00	AW406348.1	EST_HUMAN	601105344F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2887963 5'
6606	19203	32010	1.05	0.0E+00	AW406348.1	EST_HUMAN	601105344F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2887963 5'
6634	19230	32034	5.36	0.0E+00	AV719444.1	EST_HUMAN	UI-HF-BL0-acc-h-02-0-J1.r1 NIH_MGC_37 Homo sapiens cDNA clone IMAGE:3059931 5'
6642	19238	32040	1.02	0.0E+00	BE698340.1	EST_HUMAN	UI-HF-BL0-acc-h-02-0-J1.r1 NIH_MGC_37 Homo sapiens cDNA clone IMAGE:3059931 5'
6642	19238	32041	1.02	0.0E+00	BE698340.1	EST_HUMAN	UI-HF-BL0-acc-h-02-0-J1.r1 NIH_MGC_37 Homo sapiens cDNA clone IMAGE:3059931 5'
6645	19241	32044	2.16	0.0E+00	AF190860.1	NT	AV719444 GLC Homo sapiens cDNA clone GLCEHC08 5'
6648	19244	32046	1.05	0.0E+00	11420658	NT	601681150F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3951301 5'
6655	19251	32053	3.35	0.0E+00	AW163640.1	EST_HUMAN	601681150F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3951301 5'
6655	19251	32054	3.35	0.0E+00	AW163640.1	EST_HUMAN	601681150F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3951301 5'

Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6659	19255	32057	0.97	0.0E+00	W37163.1	EST_HUMAN	zb20e06.r1 Soares_fetal_jung_NbHL19W Homo sapiens cDNA clone IMAGE:302626 5' similar to SW_ZN45_HUMAN Q02386 ZINC FINGER PROTEIN 45;
6659	19255	32058	0.97	0.0E+00	W37163.1	EST_HUMAN	zb20e06.r1 Soares_fetal_jung_NbHL19W Homo sapiens cDNA clone IMAGE:302626 5' similar to SW_ZN45_HUMAN Q02386 ZINC FINGER PROTEIN 45;
6671	19267	32071	1.09	0.0E+00	BE794853.1	EST_HUMAN	601589371F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3943504 5'
6678	19274	32078	4.45	0.0E+00	BE799873.1	EST_HUMAN	601589371F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3941847 5'
6682	19278	32081	7.35	0.0E+00	BE889813.1	EST_HUMAN	601512058F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3913311 5'
6682	19278	32082	7.35	0.0E+00	BE889813.1	EST_HUMAN	601512058F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3913311 5'
6689	19285	32088	3.81	0.0E+00	L24493.1	NT	Human antigen CD27 gene, exons 1-2
6694	19290	32092	2.03	0.0E+00	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
6694	19290	32093	2.03	0.0E+00	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
6700	19296	32100	3.54	0.0E+00	6005983	NT	Homo sapiens zona pellucida glycoprotein 3A (sperm receptor) (ZP3A), mRNA
6703	19298	32102	3.88	0.0E+00	A1638412.1	EST_HUMAN	K311F11.x1 NCL CGAP GC8 Homo sapiens cDNA clone IMAGE:2242413 3' similar to SW_WNT3_MOUSE P17553 WNT-3 PROTO-ONCOGENE PROTEIN PRECURSOR.;
6704	19299	32103	1.36	0.0E+00	L32832.1	NT	Homo sapiens zinc finger homeodomain protein (ATBF1-A), mRNA, complete cds
6714	19308	32112	0.78	0.0E+00	AW505430.1	EST_HUMAN	U1HF-BN0-ama-c-01-0.U1.1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3081217 5'
6716	19310	32113	3.78	0.0E+00	AA434584.1	EST_HUMAN	zw52c03.r1 Soares_totat_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:773688 5'
6730	19324	32133	1.08	0.0E+00	BF217200.1	EST_HUMAN	601885317F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:4103683 5'
6734	19328	32133	1.72	0.0E+00	BE925875.1	EST_HUMAN	QV3-BN0047-300800-278-c06 BN0047 Homo sapiens cDNA
6774	19368	32178	1.98	0.0E+00	AU125928.1	EST_HUMAN	AU125928 NT2RM4 Homo sapiens cDNA clone NT2RM4002430 5'
6776	19368	32180	0.73	0.0E+00	BE701434.1	EST_HUMAN	PM2-NN0174-260700-001-h10 NN0174 Homo sapiens cDNA
6776	19368	32181	0.73	0.0E+00	BE701434.1	EST_HUMAN	PM2-NN0174-260700-001-h10 NN0174 Homo sapiens cDNA
6795	19386	32202	1.26	0.0E+00	BE142363.1	EST_HUMAN	CMO-HT0143-270999-062-c08 HT0143 Homo sapiens cDNA
6815	19406	32222	0.91	0.0E+00	BE006012.1	EST_HUMAN	RCO-BN0121-280300-032-e04 BN0121 Homo sapiens cDNA
6815	19406	32223	0.91	0.0E+00	BE006012.1	EST_HUMAN	RCO-BN0121-280300-032-e04 BN0121 Homo sapiens cDNA
6835	19425	32241	7.25	0.0E+00	BE169131.1	EST_HUMAN	PM3-HT0520-230200-002-c08 HT0520 Homo sapiens cDNA
6837	19427	32243	1.62	0.0E+00	BF086687.1	EST_HUMAN	IL5-GN0032-180900-145-d07 GN0032 Homo sapiens cDNA
6873	19507	32441	3.11	0.0E+00	AA180755.1	EST_HUMAN	z889e03.r1 Siratogene HeLa cell s3 937216 Homo sapiens cDNA clone IMAGE:627292 5'
6882	19517	32452	0.99	0.0E+00	U39573.1	NT	Human salivary peroxidase mRNA, complete cds
6885	19520	32454	0.72	0.0E+00	BE671987.1	EST_HUMAN	7e49b07.x1 NCL CGAP GC8 Homo sapiens cDNA clone IMAGE:3222037 3' similar to TR_Q9Z285 Q9Z285 TEK1N.;
6892	19526	32462	6.2	0.0E+00	A1840621.1	EST_HUMAN	IL3-S10024-230799-001-B01 ST0024 Homo sapiens cDNA
6892	19526	32463	6.2	0.0E+00	A1840621.1	EST_HUMAN	IL3-S10024-230799-001-B01 ST0024 Homo sapiens cDNA
6902	19536	32474	2.67	0.0E+00	11435628	NT	Homo sapiens CD8 antigen (CD8), mRNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6913	19572	32401	0.94	0.0E+00	AL042443.1	EST_HUMAN	DKFZp434D2021_r1 434 (synonym: hles3) Homo sapiens cDNA clone DKFZp434D2021 5'
6916	19575	32404	0.84	0.0E+00	AI168270.1	EST_HUMAN	co10d01.x1 Soares_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3842080 5'
6921	19580	32409	0.89	0.0E+00	BE734087.1	EST_HUMAN	TR:Q26823 Q26823 TEKTIN C1:
6938	18044	30466	1.22	0.0E+00	BE566381.1	EST_HUMAN	601567370F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3842080 5'
6943	18051	30473	13.34	0.0E+00	BE867889.1	EST_HUMAN	601339877F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3682267 5'
6943	18051	30474	13.34	0.0E+00	BE867889.1	EST_HUMAN	601443687F1 NIH_MGC_95 Homo sapiens cDNA clone IMAGE:3847697 5'
6948	19525	32347	1.75	0.0E+00	BE550162.1	EST_HUMAN	601443687F1 NIH_MGC_95 Homo sapiens cDNA clone IMAGE:3847697 5'
6948	19525	32348	1.75	0.0E+00	BE550162.1	EST_HUMAN	7b49f03.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3231581 3' similar to SW:GG95_HUMAN
6970	19547	32371	2.55	0.0E+00	BF088376.1	EST_HUMAN	Q08379 GOLGIN-95:
6977	19553	32378	2.01	0.0E+00	AA195108.1	EST_HUMAN	7b49f03.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3231581 3' similar to SW:GG95_HUMAN
6984	19482		10.79	0.0E+00	11034810	NT	Q08379 GOLGIN-95:
6988	19484	32305	1.11	0.0E+00	11431474	NT	7b49f03.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3231581 3' similar to SW:GG95_HUMAN
7001	19496	32319	2.35	0.0E+00	BF569605.1	EST_HUMAN	Q08379 GOLGIN-95:
7008	19508	32325	0.75	0.0E+00	4557364	NT	CM1-HT0877-060900-397-g11 HT0877 Homo sapiens cDNA
7016	19514		2.49	0.0E+00	J03069.1	NT	Z34g03.r1 Soares_NHMPU_S1 Homo sapiens cDNA clone IMAGE:665332 5'
7024	19558	32383	4.16	0.0E+00	AF217289.1	NT	Homo sapiens catenin (cadherin-associated protein), delta 2 (neural plakophilin-related arm-repeat protein) (CTNND2), mRNA
7024	19558	32384	4.16	0.0E+00	AF217289.1	NT	Homo sapiens sodium channel, nonvoltage-gated 1, beta (Liddle syndrome) (SCNN1B), mRNA
7025	19559	32385	1	0.0E+00	M38113.1	NT	602185852F1 NIH_MGC_45 Homo sapiens cDNA clone IMAGE:4310076 5'
7036	18058	30478	2.94	0.0E+00	11420775	NT	Homo sapiens Bloom syndrome (BLM) mRNA
7039	18059	30481	0.69	0.0E+00	BE256708.1	EST_HUMAN	Human MYCL2 gene, complete cds
7057	18076	30429	1.11	0.0E+00	AU118478.1	EST_HUMAN	Homo sapiens cadherin 20 (CDH20) mRNA, complete cds
7059	18078	30432	4.93	0.0E+00	BE262941.1	EST_HUMAN	Homo sapiens cadherin 20 (CDH20) mRNA, complete cds
7060	18079	30433	2.1	0.0E+00	Z37876.1	NT	Human neurofibromatosis type 1 gene, exon x3
7060	18079	30434	2.1	0.0E+00	Z37876.1	NT	Homo sapiens melanoma antigen, family B, 2 (MAGEB2), mRNA
7061	18080	30435	2.68	0.0E+00	AF257737.1	NT	601115515F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3356330 5'
7061	18080	30436	2.68	0.0E+00	AF257737.1	NT	AU118478 HEMBA1 Homo sapiens cDNA clone HEMBA1003679 5'
7068	18085	30441	1.44	0.0E+00	AF310105.1	NT	601148954F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3501829 5'
7071	18643	32480	0.68	0.0E+00	BE762770.1	EST_HUMAN	H sapiens mRNA for latent transforming growth factor-beta binding protein (LTBP-2)
7075	19647	32485	2.59	0.0E+00	BF569605.1	EST_HUMAN	H sapiens mRNA for latent transforming growth factor-beta binding protein (LTBP-2)
7079	19651	32490	3.92	0.0E+00	L01978.1	NT	Homo sapiens ciliary dynein heavy chain 9 (DNAH9) mRNA, complete cds

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7089	19660	32499	0.82	0.0E+00	AL039581.1	EST_HUMAN	DKFZp434D2211_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434D2211 5'
7089	19660	32500	0.82	0.0E+00	AL039581.1	EST_HUMAN	DKFZp434D2211_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434D2211 5'
7095	19666	32505	8.1	0.0E+00	BF306996.1	EST_HUMAN	601889823F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4123948 5'
7100	19670	32509	2.1	0.0E+00	U41302.1	NT	Human chromosome 18 creatine transporter (SLC6A8) and (CDM) paralogous genes, complete cds
7132	19472	32292	1.1	0.0E+00	AL049784.1	NT	Novel human gene mapping to chromosome 13
7167	19689	32546	0.89	0.0E+00	AU137738.1	EST_HUMAN	AU137738 PLACE1 Homo sapiens cDNA clone PLACE1007120 5'
7167	19689	32547	0.89	0.0E+00	AU137738.1	EST_HUMAN	AU137738 PLACE1 Homo sapiens cDNA clone PLACE1007120 5'
7173	19705	32553	1.43	0.0E+00	AW954806.1	EST_HUMAN	EST366876 MAGC resequences, MAGC Homo sapiens cDNA
7174	19706	32554	1.06	0.0E+00	BE254103.1	EST_HUMAN	601113958F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3354566 5'
7187	19719	32566	1.23	0.0E+00	L01973.1	NT	Human type VI sodium channel alpha polypeptide (SCN4A) gene, exon 14
7195	19726	32576	0.71	0.0E+00	AB007935.1	NT	Homo sapiens mRNA for KIAA0466 protein, partial cds
7195	19726	32577	0.71	0.0E+00	AB007935.1	NT	Homo sapiens mRNA for KIAA0466 protein, partial cds
7201	19732	32584	1.97	0.0E+00	AU133213.1	EST_HUMAN	AU133213 NT2RP4 Homo sapiens cDNA clone NT2RP4001556 5'
7216	19747	32603	0.86	0.0E+00	11428081	NT	Homo sapiens membrane protein CH1 (CH1), mRNA
7221	19752	32608	2.39	0.0E+00	AU143706.1	EST_HUMAN	AU143706 Y79AA1 Homo sapiens cDNA clone Y79AA1002365 5'
7222	19753	32608	1.2	0.0E+00	4758839	NT	Homo sapiens netrin 1 (NTN1), mRNA
7231	19762	32617	1.83	0.0E+00	BE891286.1	EST_HUMAN	601431819F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3917164 5'
7231	19762	32618	1.83	0.0E+00	BE891286.1	EST_HUMAN	601431819F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3917164 5'
7252	18094	30411	2.27	0.0E+00	AF137286.1	NT	Homo sapiens keratin 12 (KRT12) gene, complete cds
7252	18094	30412	2.27	0.0E+00	AF137286.1	NT	Homo sapiens keratin 12 (KRT12) gene, complete cds
7263	19791	32646	0.78	0.0E+00	BE747231.1	EST_HUMAN	601580948F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3929722 5'
7263	19791	32647	0.78	0.0E+00	BE747231.1	EST_HUMAN	601580948F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3929722 5'
7274	19802	32659	4.67	0.0E+00	11436699	NT	Homo sapiens vitamin D (1,25-dihydroxyvitamin D3) receptor (VDR), mRNA
7274	19802	32660	4.67	0.0E+00	11436699	NT	Homo sapiens vitamin D (1,25-dihydroxyvitamin D3) receptor (VDR), mRNA
							qc67a07.x1 Soares_placenta_8to6weeks_2NBHP8to9W Homo sapiens cDNA clone IMAGE:1714644 3'
							similar to SW-ARSD_HUMAN P51689 ARYL SULFATASE D PRECURSOR ; contains element HGR
7302	19830	32688	28.85	0.0E+00	A1128344.1	EST_HUMAN	repetitive element
							qc67a07.x1 Soares_placenta_8to6weeks_2NBHP8to9W Homo sapiens cDNA clone IMAGE:1714644 3'
							similar to SW-ARSD_HUMAN P51689 ARYL SULFATASE D PRECURSOR ; contains element HGR
7302	19830	32689	28.85	0.0E+00	A1128344.1	EST_HUMAN	repetitive element
7304	19832	32691	4.05	0.0E+00	11426392	NT	Homo sapiens myosin, heavy polypeptide 8, skeletal muscle, perinatal (MYH8), mRNA
7304	19832	32692	4.05	0.0E+00	11426392	NT	Homo sapiens myosin, heavy polypeptide 8, skeletal muscle, perinatal (MYH8), mRNA
7307	19835		14.08	0.0E+00	BF337375.1	EST_HUMAN	602035089F1 NCI_CGAP_Brn64 Homo sapiens cDNA clone IMAGE:4182839 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7309	19837	32695	3.39	0.0E+00	AA128453.1	EST_HUMAN	zn60909.r1 Stratagene muscle 637209 Homo sapiens cDNA clone IMAGE:562801 5' similar to TR:G806562
7314	19841	32701	0.9	0.0E+00	AL079497.1	EST_HUMAN	G806562 NEBULIN.;
7314	19841	32702	0.9	0.0E+00	AL079497.1	EST_HUMAN	DKFZp434B0228_r1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434B0228 5'
7349	19875	32741	1.2	0.0E+00	BE295499.1	EST_HUMAN	DKFZp434B0228_r1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434B0228 5'
7351	19877	32742	0.86	0.0E+00	11427965	NT	601174576F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3528794 5'
7354	19880		2.37	0.0E+00	AU118607.1	EST_HUMAN	Homo sapiens hypothetical protein (FLJ20261), mRNA
7355	19881	32745	1.77	0.0E+00	AF005213.1	NT	AU118607 HEMBA1 Homo sapiens cDNA clone HEMBA1003969 5'
7355	19881	32746	1.77	0.0E+00	AF005213.1	NT	Homo sapiens ankyrin 1 (ANK1) mRNA, complete cds
7365	19891	32754	0.99	0.0E+00	AF245505.1	NT	Homo sapiens ankyrin 1 (ANK1) mRNA, complete cds
7371	19897	32758	8.87	0.0E+00	X70172.1	NT	Homo sapiens adican mRNA, complete cds
7373	19899	32760	8.18	0.0E+00	U45448.1	NT	H sapiens DNA for ZNGP2 pseudogene, exon 4
7373	19899	32761	8.18	0.0E+00	U45448.1	NT	Human P2x1 receptor mRNA, complete cds
7385	19911	32775	0.98	0.0E+00	AW966503.1	EST_HUMAN	Human P2x1 receptor mRNA, complete cds
7387	19913	32777	3.25	0.0E+00	AW950516.1	EST_HUMAN	EST386573 MAGC resequences, MAGD Homo sapiens cDNA
7408	19933	32797	1.04	0.0E+00	AF001543.1	EST_HUMAN	EST382586 MAGC resequences, MAGA Homo sapiens cDNA
7408	19933	32798	1.04	0.0E+00	AF001543.1	EST_HUMAN	AF001543 Human cDNA (Chandrasekharappa.S.C.) Homo sapiens cDNA clone kappa_200
7408	19933	32799	1.04	0.0E+00	AF001543.1	EST_HUMAN	AF001543 Human cDNA (Chandrasekharappa.S.C.) Homo sapiens cDNA clone kappa_200
7425	19949		0.78	0.0E+00	M90354.1	NT	AF001543 Human cDNA (Chandrasekharappa.S.C.) Homo sapiens cDNA clone kappa_200
7426	19950	32815	0.71	0.0E+00	BE408283.1	EST_HUMAN	Human BTIF3 protein homologue gene, complete cds
7451	19975		1.16	0.0E+00	R87430.1	EST_HUMAN	601302879F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3637434 5'
							ym88h1.r1 Soares adult brain N2b4HB55Y Homo sapiens cDNA clone IMAGE:166031 5'
							xb39a05.y1 NCIL CGAP_Lu31 Homo sapiens cDNA clone IMAGE:2578840 5' similar to TR:Q08050 Q08050
7452	19976	32841					
7468	19990						
7470	19992	32855					
7482	20004	32869	0.88	0.0E+00	AA211663.1	EST_HUMAN	HN3/FH TRANSCRIPTION FACTOR GENESIS :
7488	20011	32877	0.92	0.0E+00	L32832.1	NT	HN3/FH TRANSCRIPTION FACTOR GENESIS :
7509	20030	32894	0.98	0.0E+00	BF306996.1	EST_HUMAN	Homo sapiens glucagon-like peptide 2 receptor (GLP2R), mRNA
7509	20030	32895	0.98	0.0E+00	BF306996.1	EST_HUMAN	MYOSIN HEAVY CHAIN, SKELETAL MUSCLE (HUMAN);
7517	20037	32905	1.48	0.0E+00	AU118767.1	EST_HUMAN	Homo sapiens zinc finger homeodomain protein (ATBF1-A) mRNA, complete cds
7561	20078	32952	4.53	0.0E+00	AJ752561.1	EST_HUMAN	601889823F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4123948 5'
							AU118767 HEMBA1 Homo sapiens cDNA clone HEMBA1004314 5'
							cn17d05.x1 Normal Human Trabecular Bone Cells Homo sapiens cDNA clone NHTBC_cnl7d05 random

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7561	20078	32953	4.53	0.0E+00	A1752561.1	EST_HUMAN	cn17d05.x1 Normal Human Trabecular Bone Cells Homo sapiens cDNA clone NHTBC_cn17d05 random
7631	20143	33023	1.45	0.0E+00	AF064205.1	NT	Homo sapiens dynactin 1 (DCTN1) gene, alternatively spliced products, exons 7 through 32 and complete
7631	20143	33023	1.45	0.0E+00	AF064205.1	NT	cds
7631	20143	33023	1.45	0.0E+00	AF064205.1	NT	cds
7639	20151	33035	1.03	0.0E+00	U74315.1	EST_HUMAN	Homo sapiens dynactin 1 (DCTN1) gene, alternatively spliced products, exons 7 through 32 and complete
7653	20165	33052	0.87	0.0E+00	BE439545.1	EST_HUMAN	cds
7654	20166	33053	1.08	0.0E+00	11417342	NT	cds
7681	20192	33081	2.91	0.0E+00	6912735	NT	HSU74315 Human chromosome 14 Homo sapiens cDNA clone 1-4
7687	20196	33084	1	0.0E+00	N76126.1	EST_HUMAN	HTM1-183F1 HTM1 Homo sapiens cDNA
7681	20200	33087	5.26	0.0E+00	BF217905.1	EST_HUMAN	Homo sapiens sema domain, seven thrombospondin repeats (type 1 and type 1-like), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 5A (SEMA5A), mRNA
7699	20208	33095	4.27	0.0E+00	AU129622.1	EST_HUMAN	Homo sapiens transient receptor potential channel 5 (TRPC5), mRNA
7715	24789	33111	1.1	0.0E+00	AW069274.1	EST_HUMAN	ze86e05.s1 Soares_fetal_lung_NbHL19W Homo sapiens cDNA clone IMAGE:299456 3'
7715	24789	33112	1.1	0.0E+00	AW069274.1	EST_HUMAN	601385465F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:4103728 5'
7718	20228	33114	6.48	0.0E+00	4501848	NT	AU129622 NT2RP2 Homo sapiens cDNA clone NT2RP2005913 5'
7725	20233	33121	1.01	0.0E+00	AV759467.1	EST_HUMAN	cr42e09.x1 Jia bone marrow stroma Homo sapiens cDNA clone HBMSC_cr42e09 3'
7726	20234	33122	6.72	0.0E+00	BE739870.1	EST_HUMAN	cr42e09.x1 Jia bone marrow stroma Homo sapiens cDNA clone HBMSC_cr42e09 3'
7726	20234	33123	6.72	0.0E+00	BE739870.1	EST_HUMAN	Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 3 (ABCA3), mRNA
7727	20235	33124	0.81	0.0E+00	6912461	NT	Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 3 (ABCA3), mRNA
7727	20235	33125	0.81	0.0E+00	6912461	NT	Homo sapiens atrophin-1 interacting protein 1, activin receptor interacting protein 1 (KIAA0705), mRNA
7728	20236	33126	1.02	0.0E+00	AU120424.1	EST_HUMAN	Homo sapiens atrophin-1 interacting protein 1, activin receptor interacting protein 1 (KIAA0705), mRNA
7728	20236	33127	1.02	0.0E+00	AU120424.1	EST_HUMAN	AU120424 HEMBB1 Homo sapiens cDNA clone HEMBB1000655 5'
7757	20265	33160	1.73	0.0E+00	BE787610.1	EST_HUMAN	AU120424 HEMBB1 Homo sapiens cDNA clone HEMBB1000655 5'
7757	20265	33161	1.73	0.0E+00	BE787610.1	EST_HUMAN	601481713F1 NIH_MGC_88 Homo sapiens cDNA clone IMAGE:3884258 5'
7767	20275	33173	0.8	0.0E+00	AW402189.1	EST_HUMAN	601481713F1 NIH_MGC_88 Homo sapiens cDNA clone IMAGE:3884258 5'
7767	20275	33173	0.8	0.0E+00	AW402189.1	EST_HUMAN	U1-HF-BK0-aak-c-07-0-JLr1 NIH_MGC_36 Homo sapiens cDNA clone IMAGE:3054733 5'
7775	20285	33182	0.9	0.0E+00	AW968044.1	EST_HUMAN	EST380119 MAGC resequences, MAGJ Homo sapiens cDNA
7775	20285	33182	0.9	0.0E+00	AW968044.1	EST_HUMAN	U1-HF-BK0-aak-c-07-0-JLr1 NIH_MGC_36 Homo sapiens cDNA clone IMAGE:3054733 5'
7785	20338	33246	1.97	0.0E+00	AU133187.1	EST_HUMAN	U1-HF-BK0-aak-c-07-0-JLr1 NIH_MGC_36 Homo sapiens cDNA clone IMAGE:3054733 5'
7840	20382		0.51	0.0E+00	BF217200.1	EST_HUMAN	AU133187 NT2RP4 Homo sapiens cDNA clone NT2RP4001507 5'
7853	20395	33300	0.85	0.0E+00	BE313013.1	EST_HUMAN	601855317F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:4103693 5'
7864	20406	33313	1.18	0.0E+00	AA149791.1	EST_HUMAN	601150347F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3503050 5'
7864	20406	33313	1.18	0.0E+00	AA149791.1	EST_HUMAN	z601c08.r1 Stratagene colon (#637204) Homo sapiens cDNA clone IMAGE:566410 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7877	20419	33327	0.8	0.0E+00	BF026628.1	EST_HUMAN	601672310F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3965131 5'
7880	20432	33341	0.51	0.0E+00	AA017021.1	EST_HUMAN	2a33h08.r1 Soares retina N2b4HR Homo sapiens cDNA clone IMAGE:360831 5'
7807	20448	33356	2.32	0.0E+00	BE736046.1	EST_HUMAN	601305658F1 NIH_MGC_38 Homo sapiens cDNA clone IMAGE:3638603 5'
7823	20485	33372	3.32	0.0E+00	M34872.1	NT	Human amyloid-beta protein (APP) gene, exon 11
7923	20485	33373	3.32	0.0E+00	M34872.1	NT	Human amyloid-beta protein (APP) gene, exon 11
7953	20495	33404	0.77	0.0E+00	AW674581.1	EST_HUMAN	b534d02.y1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:2885123 5' similar to TR:064652 O64652
7963	20495	33405	0.77	0.0E+00	AW674581.1	EST_HUMAN	b534d02.y1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:2885123 5' similar to TR:064652 O64652
7960	20502	33411	3.05	0.0E+00	AA397551.1	EST_HUMAN	2d1b04.r1 Stratagene schizo brain S11 Homo sapiens cDNA clone IMAGE:728719 5' similar to TR:G300482
7962	20504	33412	0.83	0.0E+00	AW387131.1	EST_HUMAN	G300482 POL-REVERSE TRANSCRIPTASE HOMOLOG (RETROVIRAL ELEMENT) ;
7965	20507		0.53	0.0E+00	AB020691.1	NT	MRO-ST0031-061089-003-a11 ST0031 Homo sapiens cDNA
7968	20508	33414	7.21	0.0E+00	AU142402.1	EST_HUMAN	Homo sapiens mRNA for KIA0084 protein, partial cds
7970	20512	33418	0.97	0.0E+00	BE398421.1	EST_HUMAN	AU142402 Y78AA1 Homo sapiens cDNA clone Y78AA1000277 5'
7970	20512	33419	0.97	0.0E+00	BE398421.1	EST_HUMAN	601285550F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3607237 5'
7985	20527	33433	0.52	0.0E+00	7657278	NT	601285550F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3607237 5'
7987	20528	33435	0.87	0.0E+00	W95278.1	EST_HUMAN	Homo sapiens killer cell immunoglobulin-like receptor, two domains, short cytoplasmic tail, 1 (KIR2DS1), mRNA
7987	20528	33436	0.87	0.0E+00	W95278.1	EST_HUMAN	2a05d01.r1 Soares fetal heart_NbHH19W Homo sapiens cDNA clone IMAGE:358081 5'
7988	20531		17.03	0.0E+00	BF673096.1	EST_HUMAN	2a05d01.r1 Soares fetal heart_NbHH19W Homo sapiens cDNA clone IMAGE:358081 5'
7993	20535		1.38	0.0E+00	AU134114.1	EST_HUMAN	602153008F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4294128 5'
8007	20549	33453	2.35	0.0E+00	BF525534.1	EST_HUMAN	AU134114 OVARC1 Homo sapiens cDNA clone OVARC1001298 5'
8007	20549	33454	2.35	0.0E+00	BF525534.1	EST_HUMAN	602069632F1 NCI_CGAP_Brm84 Homo sapiens cDNA clone IMAGE:4212727 5'
8037	20579	33484	1.88	0.0E+00	AL120124.1	EST_HUMAN	602069632F1 NCI_CGAP_Brm84 Homo sapiens cDNA clone IMAGE:4212727 5'
8037	20579	33485	1.88	0.0E+00	AL120124.1	EST_HUMAN	DKFZ761P092.r1 761 (synonym: hamy2) Homo sapiens cDNA clone DKFZ761P092 5'
8077	20618		1.82	0.0E+00	BE877693.1	EST_HUMAN	DKFZ761P092.r1 761 (synonym: hamy2) Homo sapiens cDNA clone DKFZ761P092 5'
8098	20639	33550	2.09	0.0E+00	AW500549.1	EST_HUMAN	601486254F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3887773 5'
8108	20647	33556	11.19	0.0E+00	AW157233.1	EST_HUMAN	UI-HF-BNO-ak4-f01-Q-UI.r1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3077498 5'
8123	20684	33574	0.65	0.0E+00	AW072395.1	EST_HUMAN	au93b08.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2783789 3' similar to
8141	20682	33584	1.05	0.0E+00	11421722	NT	TR:060463 O60463 TYPE-2 PHOSPHATIDIC ACID PHOSPHOHYDROLASE. [1];
8144	20685	33597	0.75	0.0E+00	W01616.1	EST_HUMAN	TR:060463 O60463 TYPE-2 PHOSPHATIDIC ACID PHOSPHOHYDROLASE. [1];
							6007d12.x1 Soares NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2667639 3' similar to contains element ORF repetitive element ;
							Homo sapiens centrosomal protein 2 (CEP2), mRNA
							2a36d05.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:284633 5'

Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8146	20687	33599	1.55	0.0E+00	BE745597.1	EST_HUMAN	601578185F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3926998 5'
8146	20687	33600	1.55	0.0E+00	BE745597.1	EST_HUMAN	601578185F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3926998 5'
8158	20689	33613	1.32	0.0E+00	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
8178	20719	33634	6.51	0.0E+00	D45032.1	NT	Human DNA for carboxylase, exon 5
8198	20739	33651	1.47	0.0E+00	A1867350.1	EST_HUMAN	q95c12.x1 NCI_CGAP_U12 Homo sapiens cDNA clone IMAGE:1989334 3' similar to TR:Q14673 Q14673
8211	20752	33666	3.14	0.0E+00	BE674157.1	EST_HUMAN	KIAA0164 PROTEIN. ;
8213	20754	33668	1.31	0.0E+00	A1865671.1	EST_HUMAN	7d78a04.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3278662 3' similar to TR:Q95783 Q95783
8224	20765	33682	1.38	0.0E+00	BE563650.1	EST_HUMAN	M60b10.x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2429275 3' similar to
8224	20765	33683	1.38	0.0E+00	BE563650.1	EST_HUMAN	SW-COGT_HUMAN_P50281 MATRIX METALLOPROTEINASE-14 PRECURSOR ;
8231	20772	33692	1.63	0.0E+00	11427235	NT	601334790F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3688655 5'
8231	20772	33693	1.63	0.0E+00	11427235	NT	601334790F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3688655 5'
8233	20774	33695	1.7	0.0E+00	AA403192.1	EST_HUMAN	Homo sapiens Chediak-Higashi syndrome 1 (CHS1), mRNA
8233	20774	33696	1.7	0.0E+00	AA403192.1	EST_HUMAN	z66f02.r1 Soares_tet1_9w Homo sapiens cDNA clone IMAGE:758619 5' similar to
8275	20816		4.36	0.0E+00	AA398511.1	EST_HUMAN	TR:G1304132 G1304132 TPRD. ;
8283	20824	33745	0.5	0.0E+00	BE837583.1	EST_HUMAN	z66f02.r1 Soares_tet1_9w Homo sapiens cDNA clone IMAGE:758619 5' similar to
8284	20825	33747	1.22	0.0E+00	AW364874.1	EST_HUMAN	TR:G1304132 G1304132 TPRD. ;
8284	20825	33748	1.22	0.0E+00	AW364874.1	EST_HUMAN	z173a08.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:727958 3' similar to gb:S65655
8303	20844	33766	1.24	0.0E+00	BE612586.1	EST_HUMAN	PROHIBITIN (HUMAN);
8303	20844	33767	1.24	0.0E+00	BE612586.1	EST_HUMAN	RC2-FN0094-120600-013-r07 FN0094 Homo sapiens cDNA
8318	20859	33784	1.26	0.0E+00	AL163209.2	NT	QV3-DT0045-221299-048-c07 DT0045 Homo sapiens cDNA
8318	20859	33785	1.26	0.0E+00	AL163209.2	NT	QV3-DT0045-221299-048-c07 DT0045 Homo sapiens cDNA
8326	20867	33790	0.76	0.0E+00	A1864477.1	EST_HUMAN	601452412F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3856179 5'
8333	20874	33796	0.93	0.0E+00	AA502294.1	EST_HUMAN	601452412F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3856179 5'
8338	20879		0.64	0.0E+00	11416799	NT	Homo sapiens chromosome 21 segment HS21C009
8345	20886	33807	1.33	0.0E+00	A1580780.1	EST_HUMAN	nm33a11.x1 NCI_CGAP_U14 Homo sapiens cDNA clone IMAGE:2437724 3' similar to TR:Q75457 Q75457
8348	20889		1.86	0.0E+00	BE890797.1	EST_HUMAN	CYTOSOLIC PHOSPHOLIPASE A2-GAMMA. ;
							nm33a11.x1 NCI_CGAP_U14 Homo sapiens cDNA clone IMAGE:2437724 3' similar to TR:Q75457 Q75457
							ne25d10.s1 NCI_CGAP_C03 Homo sapiens cDNA clone IMAGE:882259 3' similar to TR:G1136434
							G1136434 KIAA0187 PROTEIN. ;
							Homo sapiens protocadherin beta 3 (PCDH3), mRNA
							ta04f11.x1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:2043117 3'
							601431238F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3916569 5'

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8374	20914	33833	0.61	0.0E+00	AW245765.1	EST_HUMAN	2822701.5prime NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2822701 5'
8374	20914	33834	0.61	0.0E+00	AW245765.1	EST_HUMAN	2822701.5prime NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2822701 5'
8375	20915	33835	2.27	0.0E+00	4758695	NT	Homo sapiens mitogen-activated protein kinase kinase 13 (MAP3K13), mRNA
8375	20915	33836	2.27	0.0E+00	4758695	NT	Homo sapiens mitogen-activated protein kinase kinase 13 (MAP3K13), mRNA
8376	20916	33837	0.6	0.0E+00	U88084.1	NT	Human zinc finger protein (ZNF165), gene, exons 2 and 3
8376	20916	33838	0.6	0.0E+00	U88084.1	NT	Human zinc finger protein (ZNF165), gene, exons 2 and 3
8378	20918	33839	0.7	0.0E+00	AJ251760.1	NT	Homo sapiens NESP55, GNAS1 antisense (partial) and XLaiphas (partial) genes
8443	20983	33868	3.77	0.0E+00	X98922.1	NT	H. sapiens mRNA for gamma-glutamyltransferase
8448	20988	33904	3.77	0.0E+00	X98922.1	NT	H. sapiens mRNA for gamma-glutamyltransferase
8448	20988	33905	3.77	0.0E+00	X98922.1	NT	H. sapiens mRNA for gamma-glutamyltransferase
8463	21003	33920	1.07	0.0E+00	U82978.1	NT	Human immunoglobulin-like transcript-3 mRNA, complete cds
8502	21041	33962	0.88	0.0E+00	AF022655.1	NT	Homo sapiens cep250 centrosome associated protein mRNA, complete cds
8502	21041	33963	0.88	0.0E+00	AF022655.1	NT	Homo sapiens cep250 centrosome associated protein mRNA, complete cds
8505	21044	33965	0.89	0.0E+00	AU131671.1	EST_HUMAN	AU131671 NT2RP3 Homo sapiens cDNA clone NT2RP3003016 5'
8520	21059	33982	0.6	0.0E+00	11428572	NT	Homo sapiens immunoglobulin superfamily, member 2 (IGSF2), mRNA
8524	21063		1.64	0.0E+00	AW513513.1	EST_HUMAN	xa46601.x1 NCI CGAP_U11 Homo sapiens cDNA clone IMAGE:2707032 3' similar to gb:M14123_cd44
8526	21065		0.64	0.0E+00	BE783232.1	EST_HUMAN	RETROVIRUS-RELATED POLYPROTEIN (HUMAN);
8527	21066	33985	16.45	0.0E+00	D52850.1	EST_HUMAN	HUM084C02B Clontech human fetal brain polyA+ mRNA (#8535) Homo sapiens cDNA clone GEN-084C02 5'
8557	21086	34017	3.98	0.0E+00	BE378495.1	EST_HUMAN	601236489F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3608708 5'
8563	21102	34021	2.84	0.0E+00	AA410545.1	EST_HUMAN	282604.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone IMAGE:724062 5'
8565	21104		2.44	0.0E+00	BF313946.1	EST_HUMAN	601800571F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4129744 5'
8572	21111	34030	0.85	0.0E+00	11424387	NT	Homo sapiens leukocyte immunoglobulin-like receptor, subfamily B (with TM and ITIM domains), member 3 (LILRB3), mRNA
8578	21115	34034	1.28	0.0E+00	AW139673.1	EST_HUMAN	U1-H-B1-adr-e-12-0-U1.s1 NCI CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2717687 3'
8578	21115	34035	1.28	0.0E+00	AW139673.1	EST_HUMAN	U1-H-B1-adr-e-12-0-U1.s1 NCI CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2717687 3'
8581	21120		0.62	0.0E+00	A1640190.1	EST_HUMAN	w830b10.x1 NCI CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2298579 3' similar to TR:O15044
8600	21139	34053	1.78	0.0E+00	BF377897.1	EST_HUMAN	O15044 KIAA0335.;
8608	21147	34063	0.55	0.0E+00	AL163301.2	NT	CM1-TN0141 250800-439-b08 TN0141 Homo sapiens cDNA
8614	21153	34067	2.14	0.0E+00	BE260272.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C101
8619	21158	34071	2.58	0.0E+00	BF700165.1	EST_HUMAN	601150051F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3502835 5'
8619	21158	34072	2.58	0.0E+00	BF700165.1	EST_HUMAN	602127664F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4284542 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8619	21158	34073	2.58	0.0E+00	BF700165.1	EST_HUMAN	602127664F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4284542 5'
8633	21172	34080	0.63	0.0E+00	AI458722.1	EST_HUMAN	IK13H11.X1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:2150949 3'
8660	21189	34117	2.45	0.0E+00	AL449770.1	EST_HUMAN	AL449770 Homo sapiens fetal brain (Stanvies GS) Homo sapiens cDNA
8667	21206	34123	18.43	0.0E+00	AA962527.1	EST_HUMAN	or80g02.s1 NCI_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1602184 3' similar to gb:M36072 60S
8673	21212	34131	4.67	0.0E+00	10947037	NT	RIBOSOMAL PROTEIN L7A (HUMAN);
8673	21212	34132	4.67	0.0E+00	10947037	NT	Homo sapiens ankyrin 1, erythrocytic (ANK1), transcript variant 1, mRNA
8697	21236	34159	1.28	0.0E+00	Y11107.3	NT	Homo sapiens ankyrin 1, erythrocytic (ANK1), transcript variant 1, mRNA
8699	21238	34161	1.76	0.0E+00	BE278917.1	EST_HUMAN	Homo sapiens ITGB4 gene for Integrin beta 4 subunit, exons 3-41
8708	21247		4.02	0.0E+00	AV718377.1	EST_HUMAN	601156330F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3139734 5'
8715	21254	34175	3.11	0.0E+00	AW337277.1	EST_HUMAN	AV718377 FHT8 Homo sapiens cDNA clone FHTBAAF11 5'
8721	21260	34180	1.42	0.0E+00	AW337277.1	EST_HUMAN	xw73d07.x1 NCI_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2833644 3' similar to gb:X63587
8766	21335	34260	0.9	0.0E+00	AU124051.1	EST_HUMAN	INTEGRIN BETA-4 SUBUNIT PRECURSOR (HUMAN);
8806	21345	34269	0.54	0.0E+00	AU140704.1	EST_HUMAN	AU124051 NT2RM2 Homo sapiens cDNA clone NT2RM2001575 5'
8810	21349	34272	0.6	0.0E+00	AB007823.1	NT	AU140704 PLACE4 Homo sapiens cDNA clone PLACE4000089 5'
8810	21349	34273	0.6	0.0E+00	R17132.1	EST_HUMAN	Homo sapiens mRNA for KIAA0454 protein, partial cds
8814	21353	34276	3.85	0.0E+00	AW592233.1	EST_HUMAN	yg09e09.r1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:31674 5'
8814	21353	34276	3.85	0.0E+00	AW592233.1	EST_HUMAN	yg09e09.r1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:31674 5'
8849	21388	34311	0.5	0.0E+00	AU128804.1	EST_HUMAN	h48a09.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2935096 3'
8859	21398	34321	1.27	0.0E+00	AV714764.1	EST_HUMAN	h48a09.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2935096 3'
8874	21413	34335	2.6	0.0E+00	AL040428.1	EST_HUMAN	AU128804 NT2RP2 Homo sapiens cDNA clone NT2RP2004245 5'
8874	21413	34336	2.6	0.0E+00	AL040428.1	EST_HUMAN	AV714764 DCB Homo sapiens cDNA clone DCBAUA06 5'
8880	21418	34342	1.55	0.0E+00	AF139801.1	NT	DKFZp43C1814.s1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp43C1814 3'
8882	21420	34345	1.68	0.0E+00	AB040945.1	NT	DKFZp43C1814.s1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp43C1814 3'
8889	21427	34352	0.54	0.0E+00	BF675505.1	EST_HUMAN	Homo sapiens killer inhibitory receptor 2-2-1 (KIR221) and killer inhibitory receptor 2-2-2 (KIR222) genes, partial cds
8891	21429		0.97	0.0E+00	BF058289.1	EST_HUMAN	Homo sapiens mRNA for KIAA1512 protein, partial cds
8921	21459	34377	6.2	0.0E+00	11422857	NT	Homo sapiens mRNA for KIAA1512 protein, partial cds
8930	21468	34386	1.15	0.0E+00	K01241.1	NT	602138483F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4274708 5'
8937	21475	34395	4.14	0.0E+00	AB020630.1	NT	7K29b03.x1 NCI_CGAP_OV18 Homo sapiens cDNA clone IMAGE:3476892 3' similar to TR:O36448 O36448
8937	21475	34396	4.14	0.0E+00	AB020630.1	NT	S GAG. ;
8942	21480	34402	1.61	0.0E+00	AV660739.1	EST_HUMAN	Homo sapiens tumor protein p73 (TP73), mRNA
							Human Ig rearranged H-chain epsilon-3 pseudogene, constant region
							Homo sapiens mRNA for KIAA0823 protein, partial cds
							Homo sapiens mRNA for KIAA0823 protein, partial cds
							Homo sapiens mRNA for KIAA0823 protein, partial cds
							AV660739 GLC Homo sapiens cDNA clone GLCGG12 3'

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8948	21486	34408	3.39	0.0E+00	7706638	NT	Homo sapiens polycystin-L (PKDL), mRNA
8953	21491	34413	2.58	0.0E+00	BE793326.1	EST_HUMAN	601588304F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3942553 5'
8954	21492	34414	0.58	0.0E+00	AB033077.1	NT	Homo sapiens mRNA for KIAA1251 protein, partial cds
8954	21492	34415	0.58	0.0E+00	AB033077.1	NT	Homo sapiens mRNA for KIAA1251 protein, partial cds
8968	21504	34437	1.07	0.0E+00	H73937.1	EST_HUMAN	U030308.r1 Soares fetal liver spleen TNFLS Homo sapiens cDNA clone IMAGE:232767 5'
8978	21514	34437	4.52	0.0E+00	BE315402.1	EST_HUMAN	601141119F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3140740 5'
8978	21514	34438	4.52	0.0E+00	BE315402.1	EST_HUMAN	601141119F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3140740 5'
8986	21524	34453	0.63	0.0E+00	BE612721.1	EST_HUMAN	601452382F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3856100 5'
8986	21524	34454	0.63	0.0E+00	BE612721.1	EST_HUMAN	601452382F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3856100 5'
8988	21527	34458	0.58	0.0E+00	M89986.1	NT	Human polymorphic loci in Xq28
8991	21529	34458	1.84	0.0E+00	X14786.1	NT	Human mRNA for GABA-A receptor, alpha 1 subunit
9011	21548	34477	2.5	0.0E+00	A061395.1	EST_HUMAN	an29604.x1 Gessler Wilms tumor Homo sapiens cDNA clone IMAGE:1700094 3'
9016	21553	34481	1.82	0.0E+00	A0954607.1	EST_HUMAN	wq34a12.x1 NCI CGAP_G08 Homo sapiens cDNA clone IMAGE:2473150 3' similar to SW:MGB3_HUMAN
9021	21558	34486	4.57	0.0E+00	9256595	NT	O15480 MELANOMA-ASSOCIATED ANTIGEN B3 :
9031	21568	34487	2.1	0.0E+00	AW958311.1	EST_HUMAN	Homo sapiens protocadherin alpha 8 (PCDH8), mRNA
9041	21578	34507	2.81	0.0E+00	9635487	NT	EST370381 IMAGE resequences, IMAGE Homo sapiens cDNA
9056	21593	34523	1.13	0.0E+00	AU142862.1	EST_HUMAN	Human endogenous retrovirus, complete genome
9070	21607	34538	1.25	0.0E+00	1143685	NT	AU142862 Y79AA1 Homo sapiens cDNA clone Y79AA1000678 5'
9071	21608		0.8	0.0E+00	BE410788.1	EST_HUMAN	Homo sapiens MAP-kinase activating death domain (MADD), mRNA
9085	21621	34557	1.69	0.0E+00	BF002024.1	EST_HUMAN	601301876F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3636183 5'
9089	21635	34573	0.83	0.0E+00	AB011150.1	NT	7g87h12.x1 NCI CGAP_C018 Homo sapiens cDNA clone IMAGE:3314471 3' similar to TR:Q9UH62
9100	21636	34574	7.17	0.0E+00	BE794823.1	EST_HUMAN	Q9UH62 HYPOTHETICAL 42.5 KD PROTEIN. :
9104	21640	34579	0.52	0.0E+00	BE810282.1	EST_HUMAN	Homo sapiens mRNA for KIAA0578 protein, partial cds
9104	21640	34580	0.52	0.0E+00	BE810282.1	EST_HUMAN	Homo sapiens mRNA for KIAA0578 protein, partial cds
9107	21643	34583	1.17	0.0E+00	AU136229.1	EST_HUMAN	RC3-PT0151-280600-011-c05 PT0151 Homo sapiens cDNA
9112	21648	34588	1.18	0.0E+00	BE883843.1	EST_HUMAN	RC3-PT0151-280600-011-c05 PT0151 Homo sapiens cDNA
9112	21648	34589	1.18	0.0E+00	BE883843.1	EST_HUMAN	AU136229 PLACET1 Homo sapiens cDNA clone PLACE1003804 5'
9130	21685	34605	0.79	0.0E+00	AB011186.1	NT	601510247F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3911988 5'
9133	21688	34609	1.84	0.0E+00	AA344801.1	EST_HUMAN	601510247F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3911988 5'
9133	21688	34610	1.64	0.0E+00	AA344801.1	EST_HUMAN	601510247F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3911988 5'
9188	21705	34847	0.85	0.0E+00	AW673469.1	EST_HUMAN	Homo sapiens mRNA for KIAA0584 protein, partial cds
							EST50505 Gall bladder I Homo sapiens cDNA 5' end
							EST50505 Gall bladder I Homo sapiens cDNA 5' end
							be54408.y3 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:2900387 5' similar to TR:O60275 O60275
							KIAA0522 PROTEIN :

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9188	21705	34848	0.85	0.0E+00	AW873469.1	EST_HUMAN	bat54d08.y3 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:2900387 5' similar to TR:O60275 O60275 KIAA0522 PROTEIN;
9222	21738	34880	3.48	0.0E+00	BE207063.1	EST_HUMAN	bat09f05.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823873 5' similar to gb:L35049 Mus musculus Bcl-xL mRNA, complete cds (MOUSE);
9222	21738	34881	3.48	0.0E+00	BE207063.1	EST_HUMAN	bat09f05.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823873 5' similar to gb:L35049 Mus musculus Bcl-xL mRNA, complete cds (MOUSE);
9233	21955	34904	2.35	0.0E+00	BF348013.1	EST_HUMAN	602023150F1 NCL_CGAP_Brn67 Homo sapiens cDNA clone IMAGE:4158300 5'
9288	21794	34743	2.8	0.0E+00	BE712515.1	EST_HUMAN	QV2-HT0898-250700-282-508 HT0898 Homo sapiens cDNA
9288	21899	34846	0.98	0.0E+00	BF034377.1	EST_HUMAN	601455116F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3859035 5'
9299	21899	34847	0.98	0.0E+00	BF034377.1	EST_HUMAN	601455116F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3859035 5'
9305	21905	34854	0.53	0.0E+00	AI060351.1	EST_HUMAN	RC-BT108-040399-032 BT108 Homo sapiens cDNA
9308	21908	34856	1.54	0.0E+00	5803069	NT	Homo sapiens leukocyte immunoglobulin-like receptor, subfamily B (with TM and ITIM domains), member 5 (LILRB5), mRNA
9308	21908	34857	1.54	0.0E+00	5803069	NT	Homo sapiens leukocyte immunoglobulin-like receptor, subfamily B (with TM and ITIM domains), member 5 (LILRB5), mRNA
9317	21831	34782	1.96	0.0E+00	AL042278.1	EST_HUMAN	DKFZp434L0120_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434L0120 5'
9352	21866	34816	2.17	0.0E+00	AI089043.1	EST_HUMAN	ow60h01.x1 Soares_NSF_F8_gW_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:1651249 3' similar to TR:Q14677 Q14677 KIAA0171 PROTEIN;
9359	20298	33196	0.93	0.0E+00	BF309982.1	EST_HUMAN	601892245F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4138068 5'
9361	20300	33199	2.26	0.0E+00	11560151	NT	Homo sapiens hypothetical C2H2 zinc finger protein FLJ22504 (FLJ22504), mRNA
9361	20300	33200	2.26	0.0E+00	11560151	NT	Homo sapiens hypothetical C2H2 zinc finger protein FLJ22504 (FLJ22504), mRNA
9363	20302	33203	18.79	0.0E+00	AI290909.1	EST_HUMAN	qm09a06.x1 NCL_CGAP_Lus Homo sapiens cDNA clone IMAGE:1881298 3' similar to SW:RL2B_HUMAN P29316 60S RIBOSOMAL PROTEIN L23A;
9363	20302	33204	18.79	0.0E+00	AI290909.1	EST_HUMAN	qm09a06.x1 NCL_CGAP_Lus Homo sapiens cDNA clone IMAGE:1881298 3' similar to SW:RL2B_HUMAN P29316 60S RIBOSOMAL PROTEIN L23A;
9364	20303	33205	6.56	0.0E+00	AW953938.1	EST_HUMAN	EST386028 MAGE resequences, MAGC Homo sapiens cDNA
9391	21814	34763	3.79	0.0E+00	AF153486.1	NT	Homo sapiens polycystic kidney disease 2-like protein (PKD2L) gene, exon 8
9394	21817	34767	0.81	0.0E+00	BE885128.1	EST_HUMAN	601510882F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3912165 5'
9394	21817	34768	0.81	0.0E+00	BE885128.1	EST_HUMAN	601510882F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3912165 5'
9403	21812		19.73	0.0E+00	BE255829.1	EST_HUMAN	601109942F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3350722 5'
9406	21915	34864	1.36	0.0E+00	BE781382.1	EST_HUMAN	601468828F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3870007 5'
9406	21915	34865	1.36	0.0E+00	BE781382.1	EST_HUMAN	601468828F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3870007 5'
9408	21917	34866	29.88	0.0E+00	AW163779.1	EST_HUMAN	au86c04.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2783142 5' similar to gb:M36072 60S RIBOSOMAL PROTEIN L7A (HUMAN);

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9428	21037	34898	3	0.0E+00	BE263191.1	EST_HUMAN	601145054F2 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3160477 5'
9448	21072	34922	4.5	0.0E+00	C08158.1	EST_HUMAN	C08158 Human pancreatic islet Homo sapiens cDNA clone hbc5605
9448	21072	34923	4.5	0.0E+00	C08158.1	EST_HUMAN	C08158 Human pancreatic islet Homo sapiens cDNA clone hbc5605
9448	21074	34928	2.7	0.0E+00	BE746215.1	EST_HUMAN	601578883F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3927548 5'
9458	21084	34936	2.92	0.0E+00	11437282	NT	Homo sapiens solute carrier family 21 (organic anion transporter), member 9 (SLC21A9), mRNA
9458	21084	34937	2.92	0.0E+00	11437282	NT	Homo sapiens solute carrier family 21 (organic anion transporter), member 9 (SLC21A9), mRNA
9458	21084	34938	2.92	0.0E+00	11437282	NT	Homo sapiens solute carrier family 21 (organic anion transporter), member 9 (SLC21A9), mRNA
9478	21077	34924	1.89	0.0E+00	BE900549.1	EST_HUMAN	601673425F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3956238 5'
9488	21090	34952	0.78	0.0E+00	AV701829.1	EST_HUMAN	AV701829 ADB Homo sapiens cDNA clone ADBBYH01 5'
9508	22008	34965	2.38	0.0E+00	AF019084.1	NT	Homo sapiens keratin 2e (KRT2E) gene, complete cds
9508	22008	34966	2.38	0.0E+00	AF019084.1	NT	Homo sapiens keratin 2e (KRT2E) gene, complete cds
9540	22040	35001	1.32	0.0E+00	BE082877.1	EST_HUMAN	RC2-BT0642-130390-017-g01 BT0642 Homo sapiens cDNA
9559	22059	35021	1.98	0.0E+00	AW500293.1	EST_HUMAN	UI-HF-BN0-akg-b-12-0-UJ1.1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3076943 5'
9559	22059	35022	1.86	0.0E+00	AW500293.1	EST_HUMAN	UI-HF-BN0-akg-b-12-0-UJ1.1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3076943 5'
9568	22068	35028	1.75	0.0E+00	AF029308.1	NT	Homo sapiens chromosome 9 duplication of the T cell receptor beta locus and trypsinogen gene families
9568	22068	35029	1.75	0.0E+00	AF029308.1	NT	Homo sapiens chromosome 9 duplication of the T cell receptor beta locus and trypsinogen gene families
9570	22070	35030	0.72	0.0E+00	BE783272.1	EST_HUMAN	601470824F1 NIH_MGC_87 Homo sapiens cDNA clone IMAGE:3874037 5'
9570	22070	35031	0.72	0.0E+00	BE783272.1	EST_HUMAN	601470824F1 NIH_MGC_87 Homo sapiens cDNA clone IMAGE:3874037 5'
9579	22079	35043	1.14	0.0E+00	W56629.1	EST_HUMAN	zd16e11.1 Soares_fetal_heart_NbHH19W Homo sapiens cDNA clone IMAGE:340844 5'
9579	22079	35044	1.14	0.0E+00	W56629.1	EST_HUMAN	zd16e11.1 Soares_fetal_heart_NbHH19W Homo sapiens cDNA clone IMAGE:340844 5'
9581	22091	35055	1.05	0.0E+00	AB035356.1	NT	Homo sapiens mRNA for neuraxin +alpha protein, complete cds
9595	22095		0.94	0.0E+00	AI124780.1	EST_HUMAN	am56a11.x1 Johnston frontal cortex Homo sapiens cDNA clone IMAGE:1539548 3'
9597	22097	35060	2.65	0.0E+00	AW500528.1	EST_HUMAN	UI-HF-BN0-akg-c-07-0-UJ1.1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3077364 5'
9640	22140	35107	1.46	0.0E+00	AF009668.1	NT	Multiple sclerosis associated retrovirus polyprotein (pol) mRNA, partial cds
9666	22165	35138	2.21	0.0E+00	S78486.1	NT	AIGF=androgen-induced growth factor AIGF [human, placenta, Genomic/mRNA, 498 nt, segment 5 of 5]
9666	22165	35139	2.21	0.0E+00	S78486.1	NT	AIGF=androgen-induced growth factor AIGF [human, placenta, Genomic/mRNA, 498 nt, segment 5 of 5]
9689	22168	35144	2.54	0.0E+00	BE563320.1	EST_HUMAN	601334603F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3888680 5'
9689	22168	35161	1.5	0.0E+00	AW363135.1	EST_HUMAN	CM2-CT0311-301199-043-h11 GT0311 Homo sapiens cDNA
9708	22208	35179	0.91	0.0E+00	11436432	NT	Homo sapiens multimerin (MIMRN), mRNA

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Single Exon Probes Expressed In Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9709	22207	35180	0.74	0.0E+00	11424387	NT	Homo sapiens leukocyte immunoglobulin-like receptor, subfamily B (with TM and ITIM domains), member 3 (LILRB3), mRNA
9718	22216	35180	0.83	0.0E+00	BE208710.1	EST_HUMAN	bb28c01.x1 NIH_MGC_5 Homo sapiens cDNA clone IMAGE:2964000 3'
9733	22231	35208	2.41	0.0E+00	AU132349.1	EST_HUMAN	AU132349 NT2RP3 Homo sapiens cDNA clone NT2RP3004260 5'
9733	22231	35209	2.41	0.0E+00	AU132349.1	EST_HUMAN	AU132349 NT2RP3 Homo sapiens cDNA clone NT2RP3004260 5'
9742	22240	35221	1.45	0.0E+00	AW500936.1	EST_HUMAN	UIHF-BP0p-4ir-05-0-U1.r1 NIH_MGC_51 Homo sapiens cDNA clone IMAGE:3072897 5'
9748	22246	35227	19.68	0.0E+00	BE740490.1	EST_HUMAN	601595558F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3949383 5'
9748	22246	35228	19.68	0.0E+00	BE740490.1	EST_HUMAN	601595558F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3949383 5'
9761	22259	35242	2.32	0.0E+00	7682067	NT	Homo sapiens KIAA0345 gene product (KIAA0345), mRNA
9779	22277	35262	1.98	0.0E+00	AL042278.1	EST_HUMAN	DKFZp434L0120_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434L0120 5'
9784	22282	35268	0.71	0.0E+00	AL041084.2	EST_HUMAN	DKFZp434B2416_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434B2416 5'
9784	22292	35275	2.32	0.0E+00	AU132349.1	EST_HUMAN	AU132349 NT2RP3 Homo sapiens cDNA clone NT2RP3004260 5'
9795	22293	35276	2.48	0.0E+00	AF152308.1	NT	Homo sapiens protocadherin alpha 12 (PCDH-alpha12) mRNA, complete cds
9822	22320	35304	2.61	0.0E+00	AF009220.1	NT	Homo sapiens leukocyte immunoglobulin-like receptor-1 mRNA, complete cds
9822	22320	35305	2.61	0.0E+00	AF009220.1	NT	Homo sapiens leukocyte immunoglobulin-like receptor-1 mRNA, complete cds
9838	22336	35318	3.23	0.0E+00	BF092868.1	EST_HUMAN	MR4-TN0114-110900-101-e04 TN0114 Homo sapiens cDNA
9865	22362	35342	2.74	0.0E+00	BE280783.1	EST_HUMAN	601155227F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3138798 5'
9874	22371	35348	8.19	0.0E+00	BE388700.1	EST_HUMAN	601286351F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3613045 5'
9874	22371	35349	8.19	0.0E+00	BE388700.1	EST_HUMAN	601286351F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3613045 5'
9883	22380	35355	9.02	0.0E+00	AW236269.1	EST_HUMAN	xt72b01.x1 NCI_CGAP_CML1 Homo sapiens cDNA clone IMAGE:2699977 3' similar to gbX02152_cds1 L-
9884	22381	35356	0.92	0.0E+00	AA341305.1	EST_HUMAN	LACTATE DEHYDROGENASE M CHAIN (HUMAN);
9883	22390	35368	0.5	0.0E+00	11427235	NT	EST46740 Fetal kidney II Homo sapiens cDNA 5' end
9816	22412	35387	0.79	0.0E+00	AW084113.1	EST_HUMAN	Homo sapiens Chediak-Higashi syndrome 1 (CHS1), mRNA
9829	22425	35398	6.82	0.0E+00	AU143673.1	EST_HUMAN	EST376186 MAGE resequences, MAGH Homo sapiens cDNA
9829	22425	35399	6.82	0.0E+00	AU143673.1	EST_HUMAN	AU143673 Y79AA1 Homo sapiens cDNA clone Y79AA1002307 5'
9832	22428	35402	3.44	0.0E+00	AF072408.1	NT	AU143673 Y79AA1 Homo sapiens cDNA clone Y79AA1002307 5'
9835	22430	35404	2.52	0.0E+00	11421001	NT	Homo sapiens killer cell inhibitory receptor KIRCI gene, exons 2, 3, and 4
9835	22430	35405	2.52	0.0E+00	11421001	NT	Homo sapiens HEF like Protein (HEFL), mRNA
9868	22463	35447	3.55	0.0E+00	AU136637.1	EST_HUMAN	Homo sapiens HEF like Protein (HEFL), mRNA
9868	22463	35448	3.55	0.0E+00	AU136637.1	EST_HUMAN	AU136637 PLACE1 Homo sapiens cDNA clone PLACE1004737 5'
9884	22479	35462	2.1	0.0E+00	AJ295844.1	NT	AU136637 PLACE1 Homo sapiens cDNA clone PLACE1004737 5'
9884	22479	35463	2.1	0.0E+00	AJ295844.1	NT	Homo sapiens partial RANBP7 gene for RanBP7/importin7 and partial ZNF143 gene
9889	22484	35470	0.92	0.0E+00	AV698712.1	EST_HUMAN	Homo sapiens partial RANBP7 gene for RanBP7/importin7 and partial ZNF143 gene

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9989	22484	35471	0.92	0.0E+00	AV695712.1	EST_HUMAN	AV695712 GKC Homo sapiens cDNA clone GKCDXA07.5'
9995	22490	35478	0.57	0.0E+00	AF072408.1	NT	Homo sapiens killer cell inhibitory receptor KIRCI gene, exons 2, 3, and 4
9997	22492	35481	2.78	0.0E+00	AA196387.1	EST_HUMAN	z097h1.1.r1 Stratiogene muscle 937209 Homo sapiens cDNA clone IMAGE:628197.5'
10020	22515	35508	1.81	0.0E+00	AA131248.1	EST_HUMAN	z31f01.1.r1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:503545.5'
10020	22515	35508	1.81	0.0E+00	AA131248.1	EST_HUMAN	z31f01.1.r1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:503545.5'
10081	22558	35551	1.56	0.0E+00	AF178308.1	NT	Homo sapiens KIF4 (KIF4) mRNA, complete cds
10102	22597	35590	0.75	0.0E+00	BE880658.1	EST_HUMAN	601491565F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3893657.5'
10113	22608	35598	11.65	0.0E+00	BE730772.1	EST_HUMAN	601570712F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3845403.5'
10113	22608	35598	11.65	0.0E+00	BE730772.1	EST_HUMAN	601570712F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3845403.5'
10118	22618	35603	1.05	0.0E+00	AU127403.1	EST_HUMAN	AU127403 NT2RP2 Homo sapiens cDNA clone NT2RP2001212.5'
10127	22822	35812	0.99	0.0E+00	BE958511.1	EST_HUMAN	601645134F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:3930177.5'
10127	22822	35813	0.99	0.0E+00	BE958511.1	EST_HUMAN	601645134F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:3930177.5'
10142	22837	35828	0.79	0.0E+00	BE897487.1	EST_HUMAN	601432317F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3917453.5'
10153	22848	35842	0.78	0.0E+00	AA311824.1	EST_HUMAN	EST182353 Jurkat T-cells V1 Homo sapiens cDNA 5' end
10154	22849	35843	0.57	0.0E+00	4758827	NT	Homo sapiens neuradin III (NRXN3) mRNA
10187	22862	35857	0.81	0.0E+00	BE891113.1	EST_HUMAN	601432228F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3917598.5'
10170	22865	35860	1.29	0.0E+00	11580151	NT	Homo sapiens hypothetical C2H2 zinc finger protein FLJ22504 (FLJ22504), mRNA
10179	22874	35868	1.47	0.0E+00	AB029290.1	NT	Homo sapiens mRNA for actin binding protein ABP820, complete cds
10180	22875	35868	0.53	0.0E+00	BE304522.1	EST_HUMAN	601105459F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2887918.5'
10180	22875	35868	0.53	0.0E+00	BE304522.1	EST_HUMAN	601105459F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2887918.5'
10187	22882	35873	6.03	0.0E+00	AB006590.1	NT	Homo sapiens mRNA for estrogen receptor beta, complete cds
10187	22882	35874	6.03	0.0E+00	AB006590.1	NT	Homo sapiens mRNA for estrogen receptor beta, complete cds
10194	22889	35882	0.57	0.0E+00	AA194770.1	EST_HUMAN	z06h11.1 Stratiogene muscle 937209 Homo sapiens cDNA clone IMAGE:628965.5' similar to TR:G407097
10196	22891	35884	1.18	0.0E+00	AA704457.1	EST_HUMAN	z19b08.s1 Soares_fetal_liver_spleen_1NLS_S1 Homo sapiens cDNA clone IMAGE:450707.3' similar to gb:M14123.cds1 RETROVIRUS-RELATED GAG POLYPROTEIN (HUMAN);
10198	22893	35885	1.31	0.0E+00	M22921.1	NT	Human beta 1,4-galactosyl-transferase mRNA, complete cds
10200	22895	35888	5.5	0.0E+00	BF340331.1	EST_HUMAN	602037045F1 NCI_CGAP_Bm64 Homo sapiens cDNA clone IMAGE:4184939.5'
10200	22895	35888	5.5	0.0E+00	BF340331.1	EST_HUMAN	602037045F1 NCI_CGAP_Bm64 Homo sapiens cDNA clone IMAGE:4184939.5'
10227	22722	35713	0.93	0.0E+00	BE897149.1	EST_HUMAN	601439713F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3924578.5'
10227	22722	35714	0.93	0.0E+00	BE897149.1	EST_HUMAN	601439713F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3924578.5'
10256	22751	35739	0.53	0.0E+00	AV716271.1	EST_HUMAN	AV716271 DCB Homo sapiens cDNA clone DCBBDC09.5'
10256	22751	35740	0.53	0.0E+00	AV716271.1	EST_HUMAN	AV716271 DCB Homo sapiens cDNA clone DCBBDC09.5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10285	22780	35770	0.77	0.0E+00	AI631818.1	EST_HUMAN	wa36603.x1 NCL_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2300188 3' similar to TR:Q61204 Q61204 NOTCH2-LIKE 1
10285	22780	35771	0.77	0.0E+00	AI631818.1	EST_HUMAN	wa36603.x1 NCL_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2300188 3' similar to TR:Q61204 Q61204 NOTCH2-LIKE 1
10288	22792	35782	1.32	0.0E+00	TO3078.1	EST_HUMAN	FB23A4 Fetal brain, Stratiogene Homo sapiens cDNA clone FB23A4 3' end
10321	22815	35811	0.83	0.0E+00	AU122428.1	EST_HUMAN	AU122428 MAMMA1 Homo sapiens cDNA clone MAMMA1002368 5'
10348	22842	35838	2.69	0.0E+00	BF436218.1	EST_HUMAN	hnb45612.x1 Soares_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3265271 3'
10349	22843		1.61	0.0E+00	AV654765.1	EST_HUMAN	AV654765 GLC Homo sapiens cDNA clone GLCDZC07 3'
10367	22861	35854	3.53	0.0E+00	AW517960.1	EST_HUMAN	xu74b01.x1 NCL_CGAP_Kid8 Homo sapiens cDNA clone IMAGE:2807401 3' similar to gb:M69066 MOESIN (HUMAN)
10371	22865	35858	21.07	0.0E+00	BE549213.1	EST_HUMAN	601078764F1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3484703 5'
10386	22880	35874	0.55	0.0E+00	11436005	NT	Homo sapiens hypothetical protein DKFZp761P1010 (DKFZp761P1010), mRNA
10410	22904	35901	1.22	0.0E+00	X89893.1	NT	H. sapiens mRNA for NK receptor (183 Act)
10411	22905	35902	3	0.0E+00	BE781742.1	EST_HUMAN	601467419F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3870700 5'
10430	22924	35929	2.88	0.0E+00	BE082720.1	EST_HUMAN	RC2-BT0642:150200-012-d03 BT0642 Homo sapiens cDNA
10430	22924	35930	2.88	0.0E+00	BE082720.1	EST_HUMAN	RC2-BT0642:150200-012-d03 BT0642 Homo sapiens cDNA
10437	22931	35938	0.8	0.0E+00	Y08032.1	NT	Human endogenous retrovirus-K, LTR U5 and gag gene
10443	22937	35947	0.68	0.0E+00	A656890.1	EST_HUMAN	tt54e07.x1 NCL_CGAP_GC6 Homo sapiens cDNA clone IMAGE:2244812 3'
10450	22944	35954	5.48	0.0E+00	BE743215.1	EST_HUMAN	601573895F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3835198 5'
10450	22944	35955	5.48	0.0E+00	BE743215.1	EST_HUMAN	601573895F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3835198 5'
10453	22947	35956	1.83	0.0E+00	BE617655.1	EST_HUMAN	601441723T1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3845956 3'
10453	22947	35957	1.83	0.0E+00	BE617655.1	EST_HUMAN	601441723T1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3845956 3'
10458	22952	35960	0.49	0.0E+00	D29954.1	NT	Human mRNA for KIAA0058 gene, partial cds
10458	22952	35961	0.49	0.0E+00	D29954.1	NT	Human mRNA for KIAA0058 gene, partial cds
10474	22968	35977	0.68	0.0E+00	H39805.1	EST_HUMAN	yp01a10.r1 Soares breast 3NHBst Homo sapiens cDNA clone IMAGE:186138 5'
10487	22981	35989	0.46	0.0E+00	AW748117.1	EST_HUMAN	QV0-BT0107:230799-007-c08 BT0107 Homo sapiens cDNA
10496	22980	35999	1.14	0.0E+00	D87675.1	NT	Homo sapiens cDNA for amyloid precursor protein, complete cds
10508	23002	36010	0.8	0.0E+00	D29954.1	NT	Human mRNA for KIAA0058 gene, partial cds
10515	23053	36084	2.78	0.0E+00	AV711075.1	EST_HUMAN	AV711075 Cu Homo sapiens cDNA clone CUAAKG05 5'
10515	23053	36085	2.78	0.0E+00	AV711075.1	EST_HUMAN	AV711075 Cu Homo sapiens cDNA clone CUAAKG05 5'
10517	23055		6.05	0.0E+00	AW813783.1	EST_HUMAN	RC3-ST0197:120200-015-a03 ST0197 Homo sapiens cDNA
10525	23062	36073	7.48	0.0E+00	AW963563.1	EST_HUMAN	EST376633 IMAGE resequences, MAGH Homo sapiens cDNA
10538	23075	36088	1.91	0.0E+00	11431124	NT	Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 3 (ABCA3), mRNA
10538	23075	36089	1.91	0.0E+00	11431124	NT	Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 3 (ABCA3), mRNA

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10540	23077	36091	1.82	0.0E+00	AW057621.1	EST_HUMAN	wy61f09.x1 Soares_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:2553065 3' similar to TR:Q60566 Q60566 VDX;
10549	23085	36099	2.26	0.0E+00	BE243270.1	EST_HUMAN	TCAAP3D0817 Pediatric acute myelogenous leukemia cell (FAB M1) Baylor-HGSC project=TCAA Homo sapiens cDNA clone TCAAP0917
10550	23088	36100	2.73	0.0E+00	AI652239.1	EST_HUMAN	wb28a12.x1 NCI_CGAP_GC6 Homo sapiens cDNA clone IMAGE:2306974 3' similar to contains element MSRT1 MSRT1 repetitive element;
10550	23088	36101	2.73	0.0E+00	AI652239.1	EST_HUMAN	wb28a12.x1 NCI_CGAP_GC6 Homo sapiens cDNA clone IMAGE:2306974 3' similar to contains element MSRT1 MSRT1 repetitive element;
10561	23097	36110	4.31	0.0E+00	11545911	NT	Homo sapiens NOD2 protein (NOD2), mRNA
10561	23097	36111	4.31	0.0E+00	11545911	NT	Homo sapiens NOD2 protein (NOD2), mRNA
10578	23111	36124	1.98	0.0E+00	AW404795.1	EST_HUMAN	U1-HF-BLO-ecm-4-04-0-LI.r1 NIH_MGC_37 Homo sapiens cDNA clone IMAGE:3059383 5'
10580	23115	36129	5.92	0.0E+00	11424828	NT	Homo sapiens hypothetical protein FLJ20079 (FLJ20079), mRNA
10581	23116	36130	10.05	0.0E+00	4504536	NT	Homo sapiens 5-hydroxytryptamine (serotonin) receptor 1E (HTR1E), mRNA
10581	23116	36131	10.05	0.0E+00	4504536	NT	Homo sapiens 5-hydroxytryptamine (serotonin) receptor 1E (HTR1E), mRNA
10582	23117	36132	2.9	0.0E+00	AI991827.1	EST_HUMAN	wb32b08.x1 Soares_Dieckgrafe_colon_NHCD Homo sapiens cDNA clone IMAGE:2521715 3'
10585	23120	36136	2.57	0.0E+00	BE882109.1	EST_HUMAN	601505204F2 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3806865 5'
10589	23124	36138	15.86	0.0E+00	BE891630.1	EST_HUMAN	601434522F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3919836 5'
10591	23126	36139	2.44	0.0E+00	8923839	NT	Homo sapiens myosin, heavy polypeptide 2, skeletal muscle, adult (MYH2), mRNA
10591	23128	36140	2.44	0.0E+00	8923839	NT	Homo sapiens myosin, heavy polypeptide 2, skeletal muscle, adult (MYH2), mRNA
10608	23140	36152	6.94	0.0E+00	BE903304.1	EST_HUMAN	601674332F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3957343 5'
10608	18572	31304	2.31	0.0E+00	AA195905.1	EST_HUMAN	z995b11.r1 Stratagene muscle 937209 Homo sapiens cDNA clone IMAGE:627833 5' similar to gb:X03740 MYOSIN HEAVY CHAIN, SKELETAL MUSCLE (HUMAN);
10630	23162	36174	1.99	0.0E+00	AA806080.1	EST_HUMAN	hw17c08.x1 NCI_CGAP_GC60 Homo sapiens cDNA clone IMAGE:1240718 3' similar to gb:X57809 IG LAMBDA CHAIN C REGIONS (HUMAN);
10632	23164	36176	5.44	0.0E+00	BE793498.1	EST_HUMAN	601588829F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3943015 5'
10640	23172	36183	19.41	0.0E+00	AV727362.1	EST_HUMAN	AV727362 HTC Homo sapiens cDNA clone HTCAQH06 5'
10640	23172	36184	19.41	0.0E+00	AV727362.1	EST_HUMAN	AV727362 HTC Homo sapiens cDNA clone HTCAQH06 5'
10654	23186	36202	18.4	0.0E+00	AW516055.1	EST_HUMAN	xy04g10.x1 NCI_CGAP_Lym12 Homo sapiens cDNA clone IMAGE:2852226 3' similar to gb:M60854 40S RIBOSOMAL PROTEIN S16 (HUMAN);
10660	23192	36207	3.16	0.0E+00	AU135741.1	EST_HUMAN	AU135741 PLACE1 Homo sapiens cDNA clone PLACE1002794 5'
10665	23197	36210	2.88	0.0E+00	AW593333.1	EST_HUMAN	hg13a02.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2945475 3' similar to contains element MSRT1 repetitive element;
10665	23197	36211	2.88	0.0E+00	AW593333.1	EST_HUMAN	hg13a02.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2945475 3' similar to contains element MSRT1 repetitive element;

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10665	23197	36212	2.88	0.0E+00	AW593333.1	EST_HUMAN	hg13402.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2945475 3' similar to contains element MSR1 repetitive element;
10667	23199	36213	1.99	0.0E+00	Z34897.1	NT	H. sapiens mRNA for H1 histamine receptor
10668	23200	36214	3.18	0.0E+00	F13069.1	EST_HUMAN	HSC31C031 normalized infant brain cDNA Homo sapiens cDNA clone c-3ic03
10676	23208	36220	3.91	0.0E+00	D10083.1	NT	Homo sapiens RGH1 gene, retrovirus-like element
10679	23211	36222	33.46	0.0E+00	11425570	NT	Homo sapiens dynodine receptor 1 (skalela) (RYR1), mRNA
10685	23225	36239	3.59	0.0E+00	AW338094.1	EST_HUMAN	xw68101.x1 NCI_CGAP_Pant1 Homo sapiens cDNA clone IMAGE:2832985 3' similar to gb:X17115 IG MU CHAIN C REGION (HUMAN);
10686	23226	36240	5.84	0.0E+00	AW451230.1	EST_HUMAN	U1-H-B13-ali-h-e-01-0-U1.s1 NCI_CGAP_Sub5 Homo sapiens cDNA clone IMAGE:2736849 3'
10688	23228	36241	5.84	0.0E+00	AW451230.1	EST_HUMAN	U1-H-B13-ali-h-e-01-0-U1.s1 NCI_CGAP_Sub5 Homo sapiens cDNA clone IMAGE:2736849 3'
10699	12891		16.23	0.0E+00	4506632	NT	Homo sapiens ribosomal protein L31 (RPL31) mRNA
10701	23230	36243	2.17	0.0E+00	A8014567.1	NT	Homo sapiens mRNA for KIAA0667 protein, partial cds
10714	23242	36259	2.26	0.0E+00	BE298449.1	EST_HUMAN	601119248F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3029219 5'
10730	23256	36272	1.99	0.0E+00	A8011117.1	NT	Homo sapiens mRNA for KIAA0545 protein, partial cds
10746	23270	36286	2.18	0.0E+00	BE792155.1	EST_HUMAN	601592046F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3936539 5'
10747	23271		78.35	0.0E+00	BF684081.1	EST_HUMAN	602141405F1 NIH_MGC_46 Homo sapiens cDNA clone IMAGE:4302432 5'
10749	23273	36288	4.66	0.0E+00	AU118386.1	EST_HUMAN	AU118386 HEMBA1 Homo sapiens cDNA clone HEMBA1003486 5'
10750	23274		8.15	0.0E+00	AW236269.1	EST_HUMAN	x172601.x1 NCI_CGAP_OML1 Homo sapiens cDNA clone IMAGE:2699977 3' similar to gb:X02152_cds1 L-LACTATE DEHYDROGENASE M CHAIN (HUMAN);
10755	23279	36292	7.25	0.0E+00	A1149809.1	EST_HUMAN	qf43c03.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1752772 3'
10755	23279	36293	7.25	0.0E+00	A1149809.1	EST_HUMAN	qf43c03.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1752772 3'
10758	23280	36294	3.47	0.0E+00	AW391937.1	EST_HUMAN	QV4-ST0234-121199-032-b08 ST0234 Homo sapiens cDNA
10768	23292		1.54	0.0E+00	AU116908.1	EST_HUMAN	AU116908 HEMBA1 Homo sapiens cDNA clone HEMBA1000255 5'
10771	23295	36301	20.95	0.0E+00	11424728	NT	Homo sapiens insulin receptor (INSR), mRNA
10777	23301	36307	1.89	0.0E+00	AW804516.1	EST_HUMAN	QV0-JM0093-170400-191-406 UM0093 Homo sapiens cDNA
10777	23301	36308	1.89	0.0E+00	AW804516.1	EST_HUMAN	QV0-JM0093-170400-191-406 UM0093 Homo sapiens cDNA
10778	23302	36309	2.04	0.0E+00	BF340308.1	EST_HUMAN	602037014F1 NCI_CGAP_Brn64 Homo sapiens cDNA clone IMAGE:4184979 5'
10779	23303	36310	39.28	0.0E+00	BE261209.1	EST_HUMAN	601148357F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3163310 5'
10790	23313	36321	3.78	0.0E+00	U50326.1	NT	Human protein kinase C substrate 80K-H (PRKCSH) gene, exon 15-17
10794	23317	36326	3.48	0.0E+00	BE773036.1	EST_HUMAN	RC1-FT0134-170700-012-607 FT0134 Homo sapiens cDNA
10794	23317	36327	3.48	0.0E+00	BE773036.1	EST_HUMAN	RC1-FT0134-170700-012-607 FT0134 Homo sapiens cDNA
10816	23337	36350	55.63	0.0E+00	AA740792.1	EST_HUMAN	cb32607.s1 NCI_CGAP_Ki65 Homo sapiens cDNA clone IMAGE:1326412 3' similar to contains element MSR1 repetitive element;
10822	23343	36358	3.04	0.0E+00	AF252303.1	NT	Homo sapiens signaling lymphocytic activation molecule (SLAM) gene, exon 2

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10835	23356	36371	1.92	0.0E+00	BE266478.1	EST_HUMAN	601192748F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3536867 5'
10835	23356	36372	1.92	0.0E+00	BE266478.1	EST_HUMAN	601192748F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3536867 5'
10838	23359	36374	6.99	0.0E+00	C05089.1	EST_HUMAN	C05089 Human heart cDNA (Ynekamura) Homo sapiens cDNA clone 3NH4817
10845	23366	36382	2.16	0.0E+00	AA746375.1	EST_HUMAN	aa58h01.1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1309009 5'
10845	23366	36383	2.16	0.0E+00	AA746375.1	EST_HUMAN	aa58h01.1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1309009 5'
10856	23377	36395	8.08	0.0E+00	AL157608.1	EST_HUMAN	DKFZp761J2116_r1 761 (synonym: hemy2) Homo sapiens cDNA clone DKFZp761J2116 5'
10868	23389	36404	12.62	0.0E+00	AU116988.1	EST_HUMAN	AU116988 HEMBA1 Homo sapiens cDNA clone HEMBA1000424 5'
10881	23402	36419	2.07	0.0E+00	AV693956.1	EST_HUMAN	AV693956 GKC Homo sapiens cDNA clone GKCCNC03 5'
10913	23432	36453	3.17	0.0E+00	BE182360.1	EST_HUMAN	PM0-HT0845-060500-002-E05 HT0845 Homo sapiens cDNA
10913	23432	36454	3.17	0.0E+00	BE182360.1	EST_HUMAN	PM0-HT0845-060500-002-E05 HT0845 Homo sapiens cDNA
10814	23433		1.8	0.0E+00	AV701152.1	EST_HUMAN	AV701152 ADA Homo sapiens cDNA clone ADAAAD08 5'
10928	23446	36467	3.19	0.0E+00	BE896423.1	EST_HUMAN	601438092F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3924142 5'
10935	23452	36474	1.69	0.0E+00	AW500307.1	EST_HUMAN	UI-HF-BN0-akg-d-02-Q-UJ1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3077019 5'
10935	23452	36475	1.69	0.0E+00	AW500307.1	EST_HUMAN	UI-HF-BN0-akg-d-02-Q-UJ1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3077019 5'
							b678c04.y1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3048488 5' similar to gb:Y00345 cds 1 POLYADENYLATE-BINDING PROTEIN (HUMAN); gb:X65553 M.musculus mRNA for poly(A) binding protein (MOUSE);
10938	23455	36478	6.2	0.0E+00	BE018293.1	EST_HUMAN	601440446F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3925403 5'
10972	23487	36516	5.22	0.0E+00	BE897953.1	EST_HUMAN	ac86g11.x1 Schiller meningioma Homo sapiens cDNA clone IMAGE:1952804 3'
10973	23488	36517	1.99	0.0E+00	AI459545.1	EST_HUMAN	ac86g11.x1 Schiller meningioma Homo sapiens cDNA clone IMAGE:1952804 3'
10973	23488	36518	1.99	0.0E+00	AI459545.1	EST_HUMAN	ac86g11.x1 Schiller meningioma Homo sapiens cDNA clone IMAGE:1952804 3'
10986	23500	36530	1.82	0.0E+00	AL042278.1	EST_HUMAN	DKFZp434L0120_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434L0120 5'
11018	23532	36568	3.57	0.0E+00	4758827	NT	Homo sapiens neuradin III (NRXN3) mRNA
11019	23533	36569	8.71	0.0E+00	BF206561.1	EST_HUMAN	601870902F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4101433 5'
11023	23537	36573	20.4	0.0E+00	AW207734.1	EST_HUMAN	UI-H-BI2-aga-h-01-Q-UJ1.st NCI_CGAP_Sub4 Homo sapiens cDNA clone IMAGE:2724312 3'
11028	23542	36577	6.39	0.0E+00	AB018260.1	NT	Homo sapiens mRNA for KIAA0717 protein, partial cds
11028	23542	36578	6.39	0.0E+00	AB018260.1	NT	Homo sapiens mRNA for KIAA0717 protein, partial cds
							b604407.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823373 5' similar to TR:O76022 O76022 E1B- 5SKDA-ASSOCIATED PROTEIN. ;
11029	23543	36579	3.28	0.0E+00	BE206846.1	EST_HUMAN	b604407.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823373 5' similar to TR:O76022 O76022 E1B- 5SKDA-ASSOCIATED PROTEIN. ;
11029	23543	36580	3.28	0.0E+00	BE206846.1	EST_HUMAN	5SKDA-ASSOCIATED PROTEIN. ;
11053	23568	36602	2.05	0.0E+00	BF083687.1	EST_HUMAN	QV0-UJ0091-120900-385-b12 UJ0091 Homo sapiens cDNA
11054	20011	32877	2.13	0.0E+00	L32832.1	NT	Homo sapiens zinc finger homeodomain protein (ATBF1-A) mRNA, complete cds
11057	23569	36604	3.38	0.0E+00	BE148076.1	EST_HUMAN	RC3-HT0230-040500-110-h04 HT0230 Homo sapiens cDNA
11057	23569	36605	3.38	0.0E+00	BE148076.1	EST_HUMAN	RC3-HT0230-040500-110-h04 HT0230 Homo sapiens cDNA

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Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11092	23604	36844	5.37	0.0E+00	BF507876.1	EST_HUMAN	UI-H-BI4-ack-b-10-0-UI.s1.NC1_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3085028 3'
11092	23604	36845	5.37	0.0E+00	BF507876.1	EST_HUMAN	UI-H-BI4-ack-b-10-0-UI.s1.NC1_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3085028 3'
11101	23611	36851	3.82	0.0E+00	AU135170.1	EST_HUMAN	AUT135170 PLACE1 Homo sapiens cDNA clone PLACE:1001381 5'
11105	23615	36855	1.61	0.0E+00	BF576138.1	EST_HUMAN	602132459F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4271630 5'
11105	23615	36856	1.61	0.0E+00	BF576138.1	EST_HUMAN	602132459F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4271630 5'
11108	23616	36857	8.62	0.0E+00	BE76401.1	EST_HUMAN	601486828F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3889207 5'
11108	23616	36858	8.62	0.0E+00	BE76401.1	EST_HUMAN	601486828F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3889207 5'
11111	23623	36864	1.85	0.0E+00	DB7682.1	NT	Human mRNA for KIAA0241 gene, partial cds
11119	23628		5.3	0.0E+00	BF240536.1	EST_HUMAN	601875630F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:4099710 5'
11132	23640	36880	3.05	0.0E+00	AB037737.1	NT	Homo sapiens mRNA for KIAA1316 protein, partial cds
11132	23640	36881	3.05	0.0E+00	AB037737.1	NT	Homo sapiens mRNA for KIAA1316 protein, partial cds
11137	23645	36885	3.57	0.0E+00	11430868	NT	Homo sapiens retinoblastoma-like 2 (p130) (RBL2), mRNA
11137	23645	36886	3.57	0.0E+00	11430868	NT	Homo sapiens retinoblastoma-like 2 (p130) (RBL2), mRNA
11154	23661	36706	9.12	0.0E+00	4503544	NT	Homo sapiens eukaryotic translation initiation factor 5A (EIF5A), mRNA
11162	23669	36714	1.98	0.0E+00	BF576287.1	EST_HUMAN	602134132F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4289502 5'
11165	23672	36718	6.44	0.0E+00	AW328173.1	EST_HUMAN	dr04g05.x1 NIH_MGC_3 Homo sapiens cDNA clone IMAGE:2847177 5'
11168	23675		46.81	0.0E+00	M55083.1	NT	Human gamma actin-like pseudogene, complete cds
11173	23680	36725	5.47	0.0E+00	BF308998.1	EST_HUMAN	601889823F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4123948 5'
11173	23680	36726	5.47	0.0E+00	BF308998.1	EST_HUMAN	601889823F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4123948 5'
11180	23686	36733	45.22	0.0E+00	BF362462.1	EST_HUMAN	QV2-NN0054-230800-333-604 NN0054 Homo sapiens cDNA
11201	23706	36757	1.99	0.0E+00	U36284.1	NT	Human beta-prime-adaptin (BAM22) gene, exon 16
11201	23706	36758	1.99	0.0E+00	U36284.1	NT	Human beta-prime-adaptin (BAM22) gene, exon 16
11205	23710		6.26	0.0E+00	BE897051.1	EST_HUMAN	601439605F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3824577 5'
11208	23711		1.61	0.0E+00	4503786	NT	Homo sapiens fyn-related kinase (FRK), mRNA
11217	23720	36774	2.82	0.0E+00	8923698	NT	Homo sapiens golgin-like protein (GLP), mRNA
11219	23722		2.56	0.0E+00	BF207682.1	EST_HUMAN	601861947F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:4081715 5'
11220	23723		7.59	0.0E+00	BE257744.1	EST_HUMAN	601116705F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3357384 5'
11233	23764	36820	5.51	0.0E+00	BE206846.1	EST_HUMAN	ba04d07.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823373 5' similar to TR:O76022 O76022 E1B-55KDA-ASSOCIATED PROTEIN. ;
11233	23764	36821	5.51	0.0E+00	BE206846.1	EST_HUMAN	ba04d07.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823373 5' similar to TR:O76022 O76022 E1B-55KDA-ASSOCIATED PROTEIN. ;
11235	23766	36823	4.56	0.0E+00	AW753028.1	EST_HUMAN	QV0-CT0225-101299-071-406 CT0225 Homo sapiens cDNA
11240	23771		3.42	0.0E+00	AA558707.1	EST_HUMAN	nk42c08.s1.NC1_CGAP_P14 Homo sapiens cDNA clone IMAGE:1043342 similar to gb:M95178 ALPHA-ACTININ 1, CYTOSKELETAL ISOFORM (HUMAN);

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11241	18112	30521	6.08	0.0E+00	AI934954.1	EST_HUMAN	wp08g08.x1 NCI_CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2464094 3'
11242	23772	36829	9.55	0.0E+00	AW327895.1	EST_HUMAN	d02b08.x1 NIH_MGC_3 Homo sapiens cDNA clone IMAGE:2846919 5'
11260	24801	36847	1.56	0.0E+00	AW292778.1	EST_HUMAN	UI-H-BW0-qj-d-07-q-U1.s1 NCI_CGAP_Sub6 Homo sapiens cDNA clone IMAGE:2729509 3'
11266	23004	36012	2.1	0.0E+00	4758827	NT	Homo sapiens neurexin III (NRXN3) mRNA
11274	23727	36781	1.59	0.0E+00	BE965909.2	EST_HUMAN	601659088R1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3895916 3'
11275	23728	36783	4.55	0.0E+00	BE185658.1	EST_HUMAN	601659088R1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3895916 3'
11288	23740	36796	5.82	0.0E+00	AL046540.1	EST_HUMAN	IL5-HT0731-020500-077-r05.H10731 Homo sapiens cDNA
11288	23740	36797	5.82	0.0E+00	AL046540.1	EST_HUMAN	DKFZp434G178_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434G178 5'
11288	23750	36807	16.85	0.0E+00	AI923116.1	EST_HUMAN	wn83g03.x1 NCI_CGAP_U1t Homo sapiens cDNA clone IMAGE:2452466 3' similar to gb:S37431 LAMININ RECEPTOR (HUMAN);
11301	23764	36851	7	0.0E+00	AA760913.1	EST_HUMAN	nz11c07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1287468 3' similar to TR:Q13686
11301	23764	36852	7	0.0E+00	AA760913.1	EST_HUMAN	Q13686 ALKB HOMOLOG PROTEIN. ;
11306	23769	36858	2.02	0.0E+00	BE910546.1	EST_HUMAN	Q13686 ALKB HOMOLOG PROTEIN. ;
11314	23012	36021	7.16	0.0E+00	BE676347.1	EST_HUMAN	601501090F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3902926 5'
11323	23021	36030	1.89	0.0E+00	AV757420.1	EST_HUMAN	7127112.x1 NCI_CGAP_CLL1 Homo sapiens cDNA clone IMAGE:3295919 3' similar to TR:O00409 O00409 CHECKPOINT SUPPRESSOR 1. ;
11352	23806	36865	3.55	0.0E+00	L39891.1	NT	AV757420 BM Homo sapiens cDNA clone BMFAGH03 5'
11352	23806	36866	3.55	0.0E+00	L39891.1	NT	Homo sapiens polycystic kidney disease-associated protein (PKD1) gene, complete cds
11366	23818	36879	4.02	0.0E+00	AU138211.1	EST_HUMAN	Homo sapiens polycystic kidney disease-associated protein (PKD1) gene, complete cds
11381	23833	36896	9.87	0.0E+00	BE622317.1	EST_HUMAN	AU138211 PLACE1 Homo sapiens cDNA clone PLACE1008077 5'
11386	23838	36900	11.61	0.0E+00	AI207425.1	EST_HUMAN	601441096F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3916270 5'
11386	23838	36901	11.61	0.0E+00	AI207425.1	EST_HUMAN	HA2767 Human fetal liver cDNA library Homo sapiens cDNA
11415	23868	36928	36.86	0.0E+00	BE748999.1	EST_HUMAN	HA2767 Human fetal liver cDNA library Homo sapiens cDNA
11425	23876	36940	2.19	0.0E+00	AU141882.1	EST_HUMAN	601572186T1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:3839012 3'
11425	23876	36941	2.19	0.0E+00	AU141882.1	EST_HUMAN	601572186T1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:3839012 3'
11428	23878	36944	2.52	0.0E+00	AW006022.1	EST_HUMAN	AU141882 THYR01 Homo sapiens cDNA clone THYR01001398 5'
11431	24802	36947	3.76	0.0E+00	BF002333.1	EST_HUMAN	wz91h01.x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2566225 3' similar to WP:F53H10.2
11450	23900	36987	3.61	0.0E+00	AW387776.1	EST_HUMAN	CE11040 ZINC FINGER, C2H2 TYPE ;
							7h2b2b10.x1 NCI_CGAP_Co16 Homo sapiens cDNA clone IMAGE:3316698 3' similar to TR:Q13458 Q13458 TRIO. ;
							MR4-ST0118-281099-012-b03 ST0118 Homo sapiens cDNA

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Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11450	23900	36968	3.81	0.0E+00	AW387776.1	EST_HUMAN	MR4-ST0118-261099-012-603 ST0118 Homo sapiens cDNA
11459	23909		2.48	0.0E+00	AW863777.1	EST_HUMAN	MR9-SN0010-310300-107-h03 SN0010 Homo sapiens cDNA
11471	23921	36990	3.38	0.0E+00	11435244	NT	Homo sapiens KIAA0247 gene product (KIAA0247), mRNA
11471	23921	36991	3.38	0.0E+00	11435244	NT	Homo sapiens KIAA0247 gene product (KIAA0247), mRNA
11476	23926	36997	7.44	0.0E+00	U36253.1	NT	Human beta-prime-adaptin (BAM22) gene, exon 5
11479	23929	36999	12.8	0.0E+00	BE379254.1	EST_HUMAN	601237691F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3609623 5'
11479	23929	37000	12.8	0.0E+00	BE379254.1	EST_HUMAN	601237691F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3609623 5'
11492	23941	37012	2.5	0.0E+00	BE794759.1	EST_HUMAN	601590586F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3944708 5'
11493	23942	37013	115.56	0.0E+00	BE879633.1	EST_HUMAN	601491821F1 NIH_MGC_59 Homo sapiens cDNA clone IMAGE:3894220 5'
11507	23956	37026	18.86	0.0E+00	BE409693.1	EST_HUMAN	601269403F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3629544 5'
11508	23957	37027	1.84	0.0E+00	BE148650.1	EST_HUMAN	MRO-HT0241-150500-011-02 HT0241 Homo sapiens cDNA
11509	23958	37028	3.08	0.0E+00	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
11509	23958	37028	3.08	0.0E+00	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
11510	18292	30771	1.77	0.0E+00	D26535.1	NT	Human gene for dihydropyrimidine succinyltransferase, complete cds (exon 1-15)
11510	18292	30772	1.77	0.0E+00	D26535.1	NT	Human gene for dihydropyrimidine succinyltransferase, complete cds (exon 1-15)
11518	23966	37038	2.03	0.0E+00	AU132940.1	EST_HUMAN	AU132940 NT2RP4 Homo sapiens cDNA clone NT2RP4000929 5'
11521	23969	37040	4.44	0.0E+00	BE903372.1	EST_HUMAN	601676357F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3958935 5'
11533	23981	37051	1.84	0.0E+00	BF312552.1	EST_HUMAN	601897524F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4127069 5'
11533	23981	37052	1.84	0.0E+00	BF312552.1	EST_HUMAN	601897524F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4127069 5'
11535	23983	37054	3.01	0.0E+00	X51755.1	NT	Human lambda-immunoglobulin constant region complex (germline)
11535	23983	37055	3.01	0.0E+00	X51755.1	NT	Human lambda-immunoglobulin constant region complex (germline)
11544	23992		4.03	0.0E+00	BE908402.1	EST_HUMAN	601498553F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3900396 5'
11560	24007	37078	1.74	0.0E+00	9635487	NT	Human endogenous retrovirus, complete genome
11574	24803		23.39	0.0E+00	BF309120.1	EST_HUMAN	601860534F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4131416 5'
11590	24026	37094	55.98	0.0E+00	BE29175.1	EST_HUMAN	60117407F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3532968 5'
11599	24032	37102	7.09	0.0E+00	AL040793.1	EST_HUMAN	DKFZp334D0415.1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp334D0415 5'
11652	25091	30499	6.23	0.0E+00	BE312542.1	EST_HUMAN	601150023F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3503020 5'
11666	24925		1.78	0.0E+00	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
11668	24936		8.17	0.0E+00	AI180993.1	EST_HUMAN	qet1b12.x1 Soares_fetal_lung_NbHL19W Homo sapiens cDNA clone IMAGE:1739231 3'
11679	24097		3.67	0.0E+00	AB011399.1	NT	Homo sapiens gene for AF-6, complete cds
11699	24112		4.16	0.0E+00	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046

Table 4

Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLASTE Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11701	24114		1.35	0.0E+00	AB016195.1	NT	Homo sapiens ELK1 pseudogene (ELK2) and immunoglobulin heavy chain gamma pseudogene (IGHGP)
11709	24120		3.59	0.0E+00	11417962	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
11728	24134		5.98	0.0E+00	5802973	NT	Homo sapiens antioxidant protein 1 (AOP1), nuclear gene encoding mitochondrial protein, mRNA
11783	24897	30711	1.49	0.0E+00	AF240788.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
11774	24809		4.78	0.0E+00	AL041931.1	EST_HUMAN	DKFZp434K0819.1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434K0819.5
11803	25058		4.28	0.0E+00	11418318	NT	Homo sapiens G-2 and S-phase expressed 1 (GTSE1), mRNA
11812	24184		11.29	0.0E+00	AL046544.1	EST_HUMAN	DKFZp434G218.1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434G218.5
11824	24841		2.82	0.0E+00	AI903487.1	EST_HUMAN	IL-BT030-271098-001 BT030 Homo sapiens cDNA
11862	25079		2.35	0.0E+00	N54484.1	EST_HUMAN	y40608.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:245222 3' similar to SW:POL_BAEVM P10272 POL POLYPROTEIN ;
11877	24227		4.72	0.0E+00	AF106858.1	NT	Homo sapiens adenylosuccinate lyase gene, complete cds
11880	13490	26007	5.46	0.0E+00	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
11880	13490	26008	5.46	0.0E+00	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
11889	24945		2.49	0.0E+00	10082587	NT	Homo sapiens nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 2 (NFATC2), mRNA
11917	13204		3.24	0.0E+00	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
11955	24720	30870	4.32	0.0E+00	11430460	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
12017	24871	30708	24.36	0.0E+00	AW590082.1	EST_HUMAN	hg31e06.x1 NCI_CGAP_G06 Homo sapiens cDNA clone IMAGE:2847234 3' similar to contains Alu repetitive element/contains element MER22 repetitive element ;
12028	24926		1.5	0.0E+00	BE090210.1	EST_HUMAN	RC8-BT0711-290300-011-D05 BT0711 Homo sapiens cDNA
12073	24938		2	0.0E+00	AF088757.1	NT	Homo sapiens somatostatin receptor subtype 3 (SSTR3) gene, 5' flanking region and partial cds
12112	24373		4.16	0.0E+00	8635487	NT	Human endogenous retrovirus, complete genome
12155	24931		1.93	0.0E+00	AI204914.1	EST_HUMAN	an05f04.x1 Strategene schizo brain S11 Homo sapiens cDNA clone IMAGE:1684759 3'
12169	24927		1.52	0.0E+00	BE439762.1	EST_HUMAN	HTM1-654F HTM1 Homo sapiens cDNA
12244	14314	26855	4.92	0.0E+00	H30132.1	EST_HUMAN	y559e08.r1 Soares breast 3NHBst Homo sapiens cDNA clone IMAGE:182246 5' similar to gb:ME4089
12244	14314	26856	4.92	0.0E+00	H30132.1	EST_HUMAN	GAMMA-GLUTAMYL TRANSPEPTIDASE 5 PRECURSOR (HUMAN);
12256	24498		33.19	0.0E+00	D50859.1	NT	y559e08.r1 Soares breast 3NHBst Homo sapiens cDNA clone IMAGE:182246 5' similar to gb:ME4089
12259	24469	30828	3.51	0.0E+00	11418189	NT	GAMMA-GLUTAMYL TRANSPEPTIDASE 5 PRECURSOR (HUMAN);
12259	24469	30829	3.51	0.0E+00	11418189	NT	Human gamma-cytoplasmic actin (ACTGP9) pseudogene
12259	24469	30829	3.51	0.0E+00	11418189	NT	Homo sapiens thyroid autoantigen 70kD (Ku antigen) (G22P-1), mRNA
12259	24469	30829	3.51	0.0E+00	11418189	NT	Homo sapiens thyroid autoantigen 70kD (Ku antigen) (G22P-1), mRNA

Table 4
Single Exon Probes Expressed in Fetal Liver

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12279	14717	27289	1.42	0.0E+00	4758488	NT	Homo sapiens GTP binding protein 1 (GTPBP1), mRNA
12318	24508		1.61	0.0E+00	AW664988.1	EST_HUMAN	h86g06.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2879154 3'
12401	15963	28440	5.09	0.0E+00	4885312	NT	Homo sapiens G protein-coupled receptor 24 (GPR24), mRNA
12409	18031	30492	2.86	0.0E+00	6806918	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
12412	24568		2.55	0.0E+00	AB029800.1	NT	Homo sapiens CST gene for cerebroside sulfotransferase, exon 1, 2, 3, 4, 5
12453	24587	30917	1.67	0.0E+00	9558724	NT	Homo sapiens cleavage and polyadenylation specific factor 1, 160kD subunit (CPSF1), mRNA
12481	25102		2.92	0.0E+00	AL163248.2	NT	Homo sapiens chromosome 21 segment HS21C046
12488	13277	25754	2.02	0.0E+00	6806918	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
12573	24670	30878	1.55	0.0E+00	11417862	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
12578	24872		2.54	0.0E+00	AB002059.1	NT	Homo sapiens DNA for Human P2XM, complete cds
12580	24878		4.31	0.0E+00	7657020	NT	Homo sapiens DKFZp434P211 protein (DKFZP434P211), mRNA
12600	24886		2.35	0.0E+00	AB026898.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)

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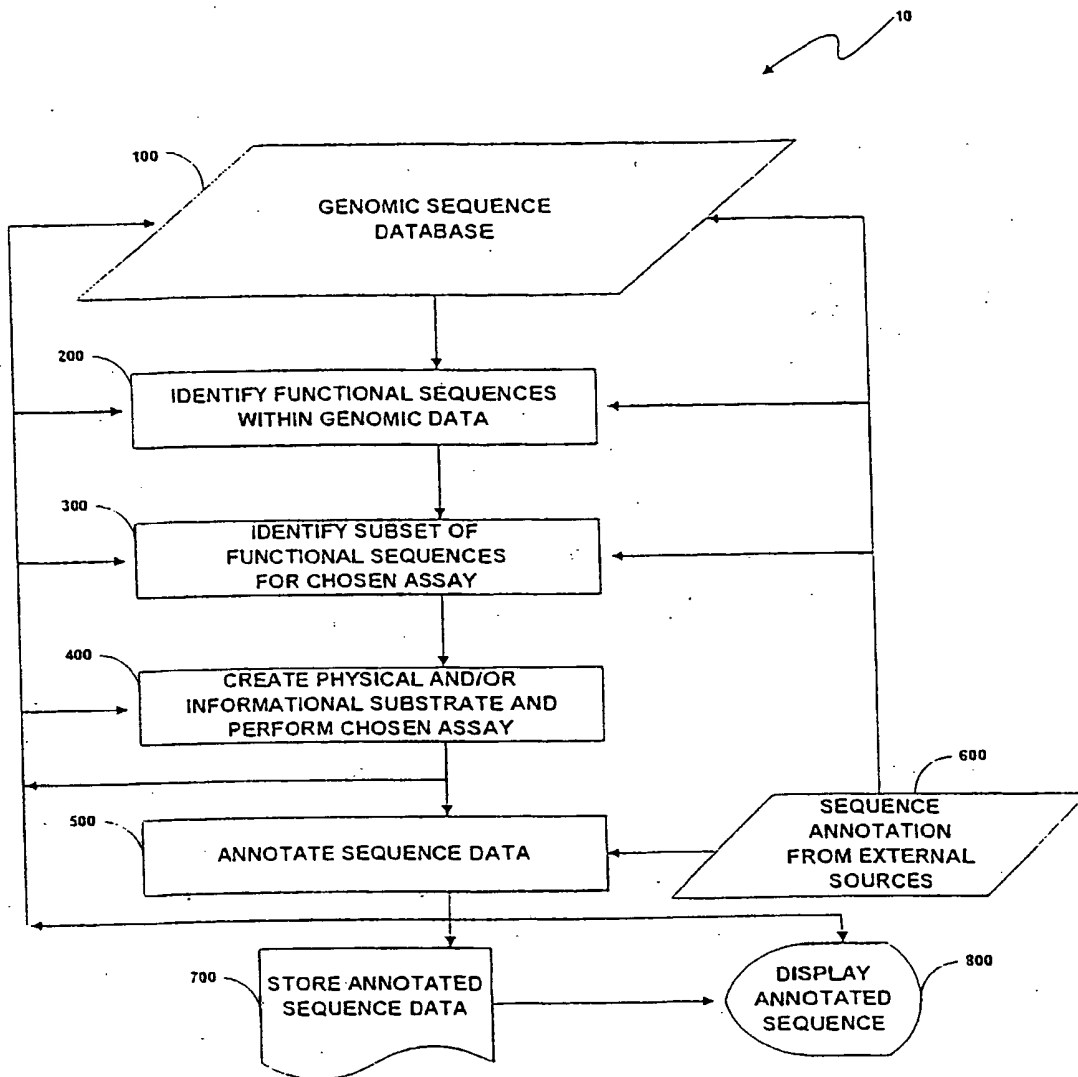


Fig. 1

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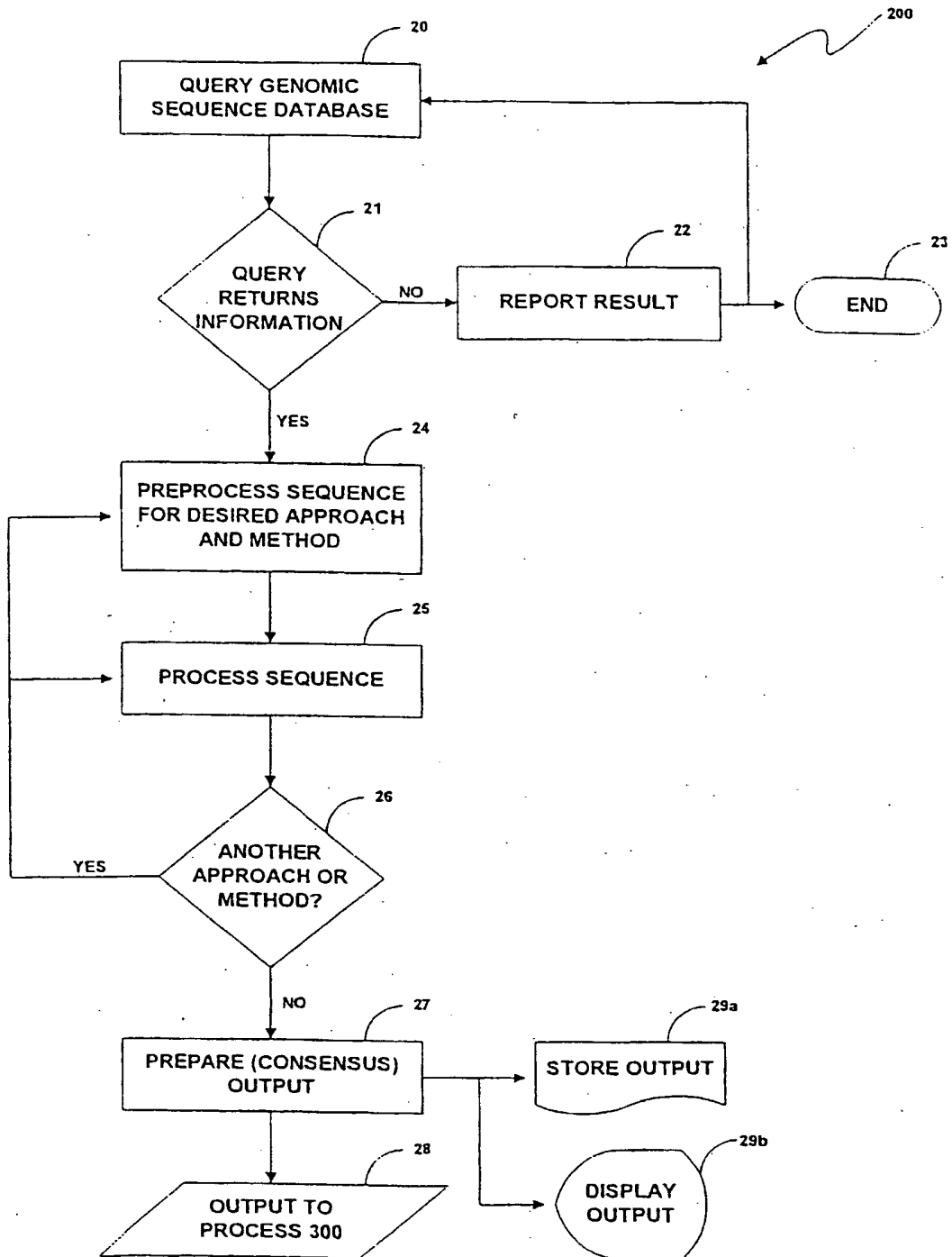


Fig. 2

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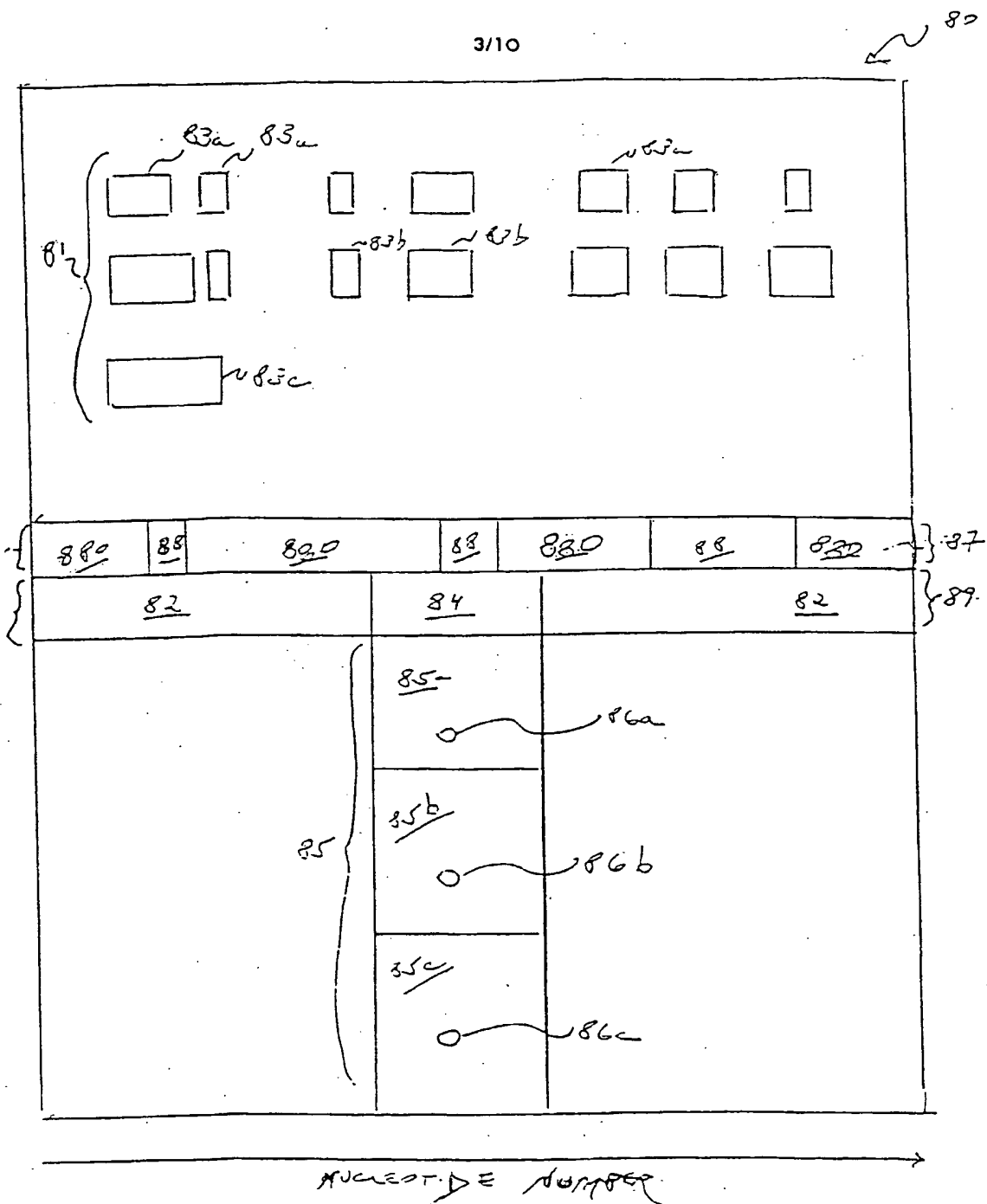


Fig. 3

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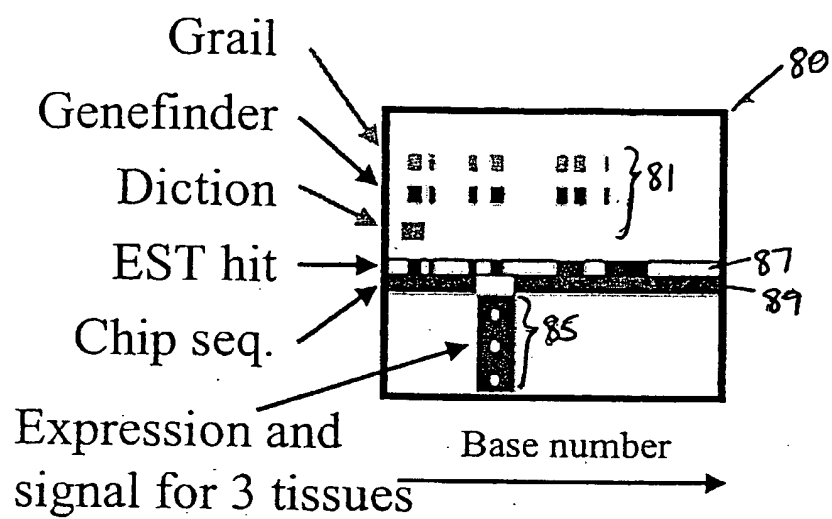


Fig. 4

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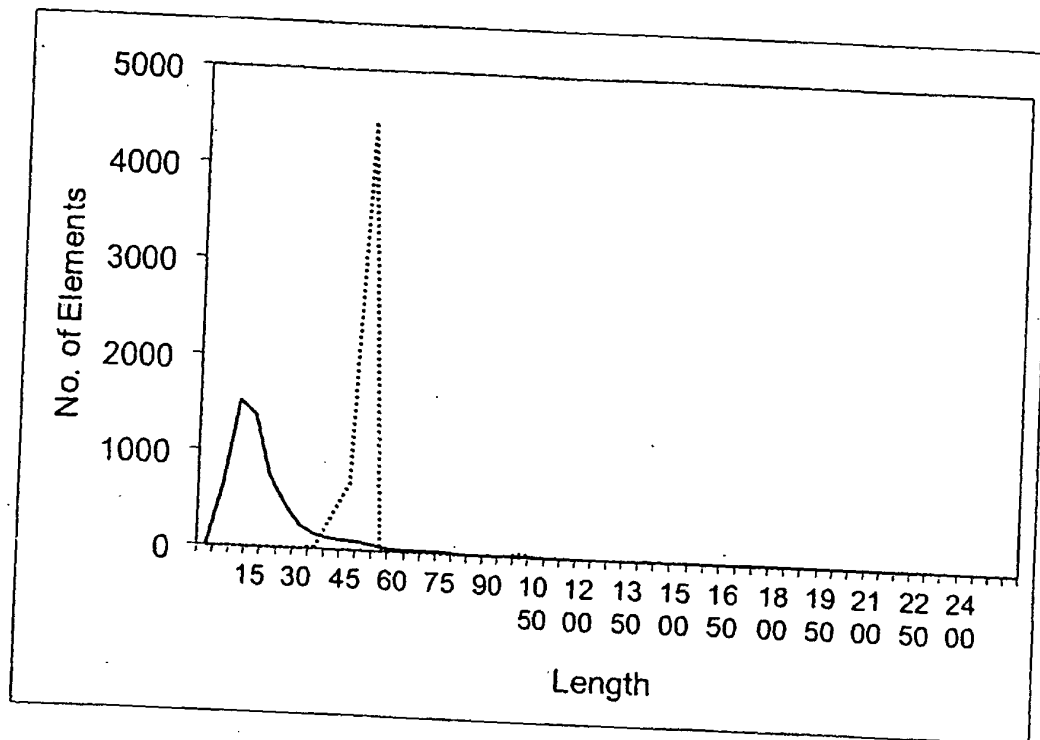


Fig. 5

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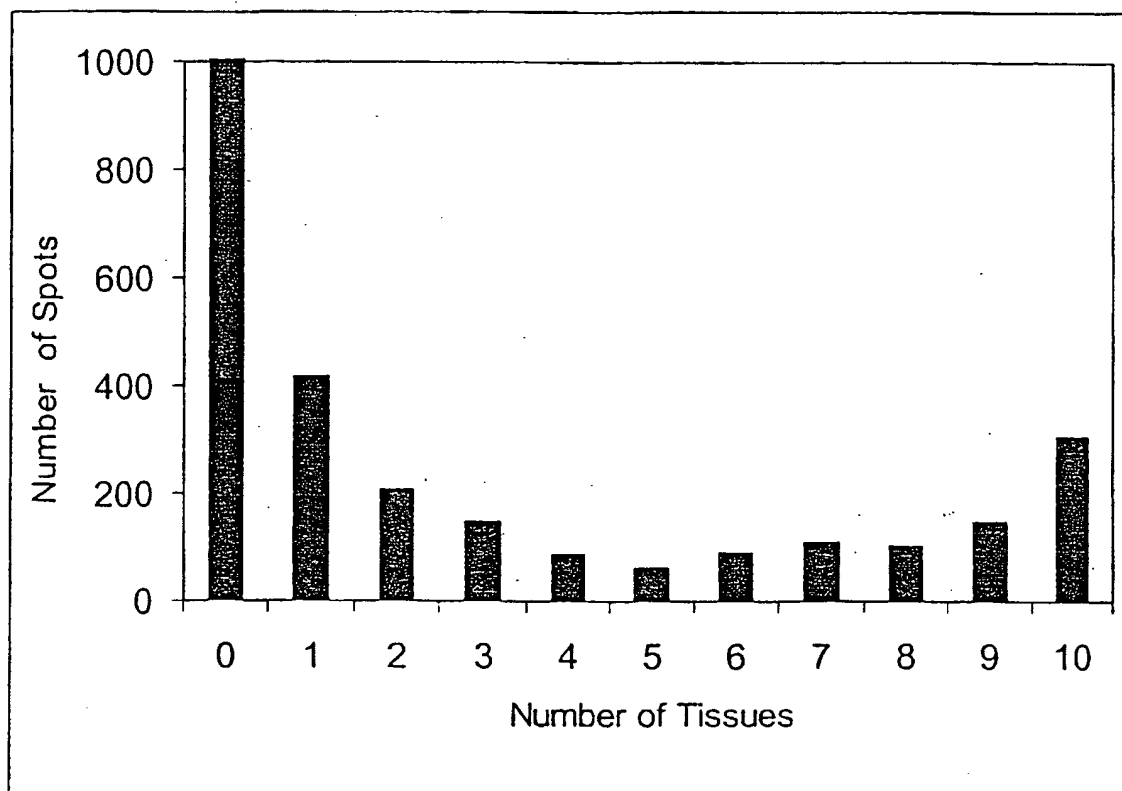
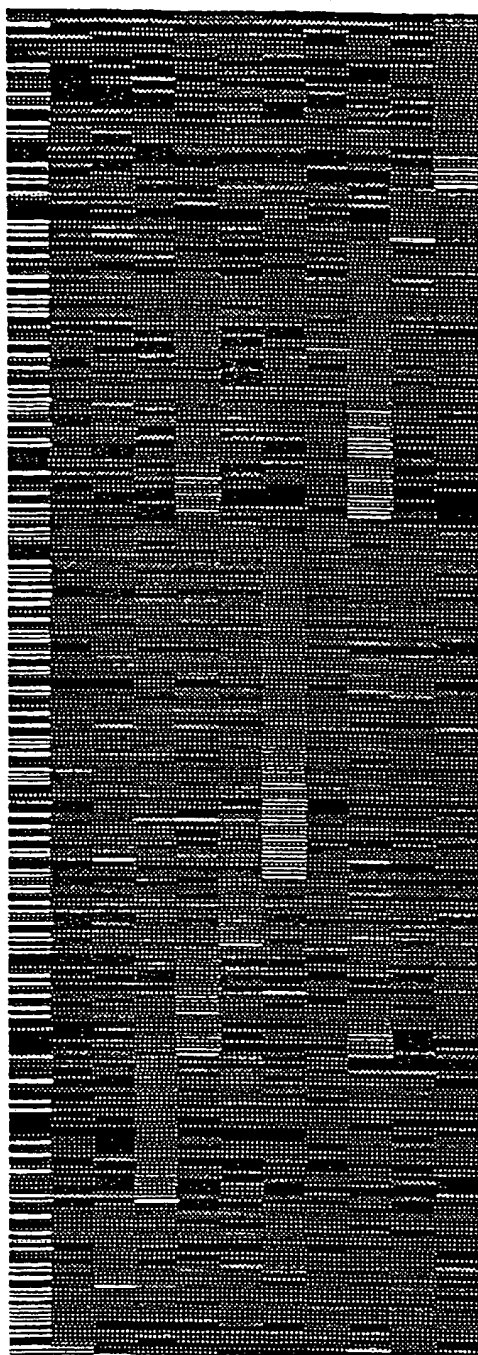


Fig. 6



EST Hit
Bone Marrow
Brain
BT474
Fetal Liver
HBL100
Heart
Hela
Liver
Lung
Placenta

Fig. 7a

ratio legend

>9
8
7
6
5
4
3
2
1



Fig. 7b

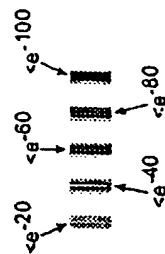


Fig. 7c

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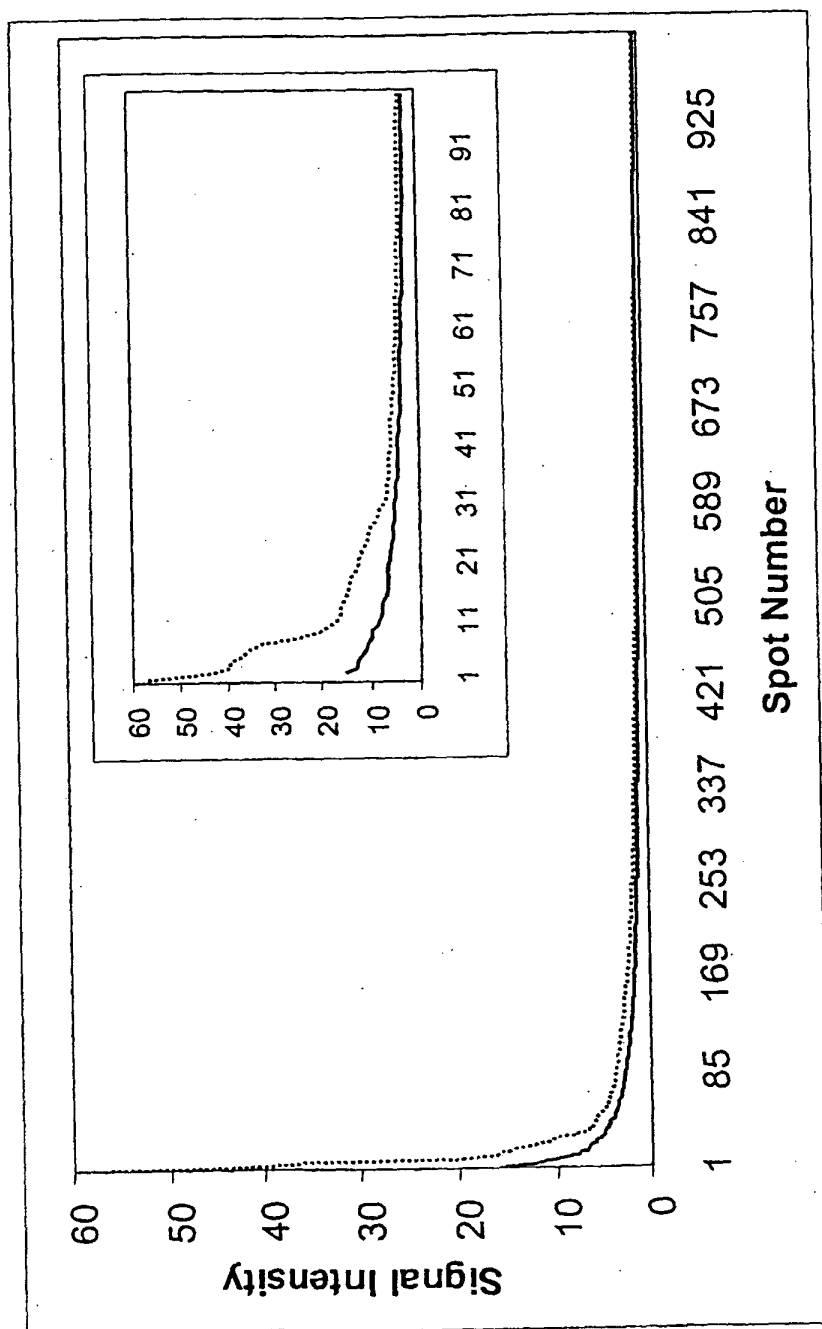


Fig. 8

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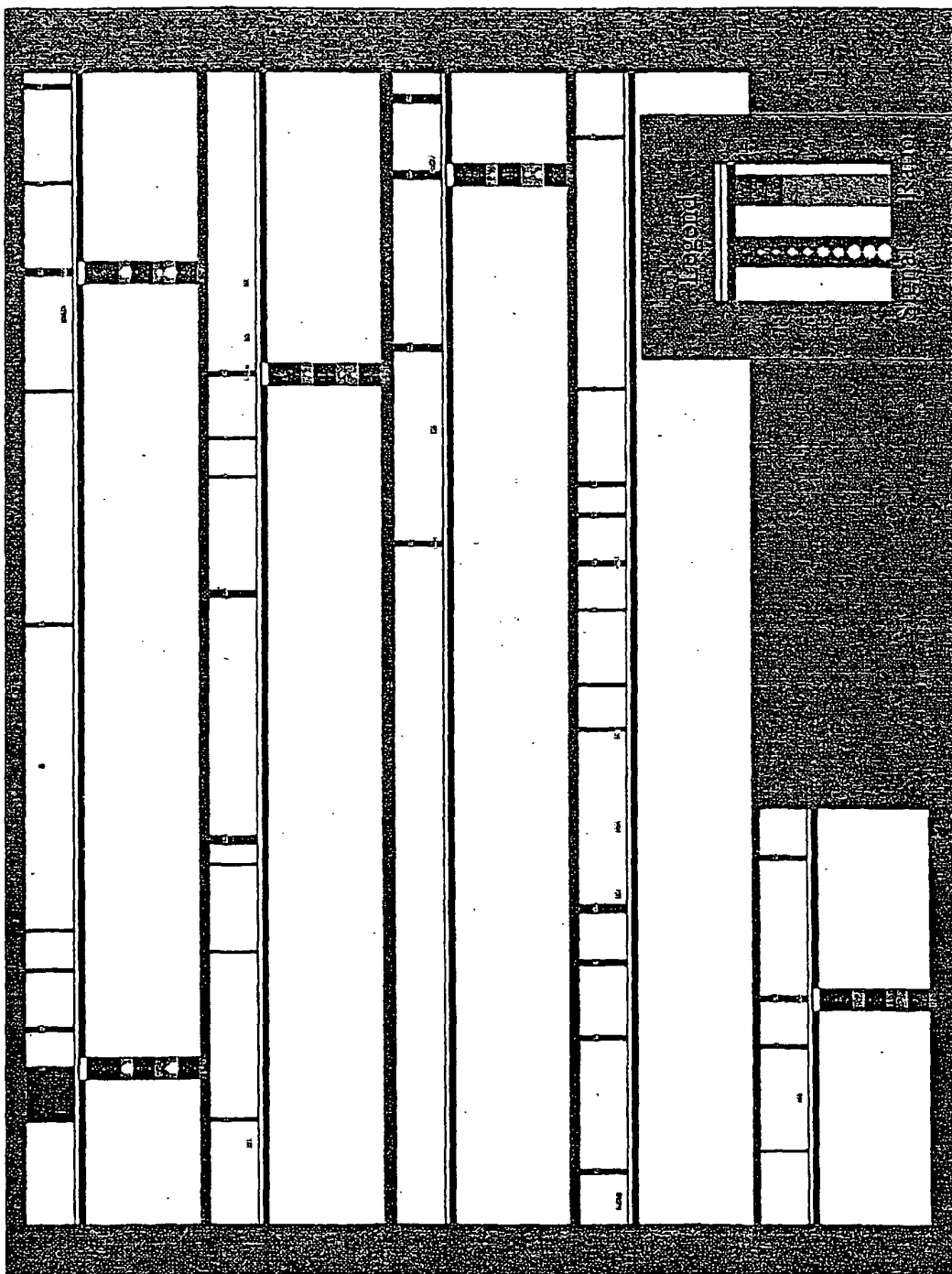


Fig. 9

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Fig. 10

